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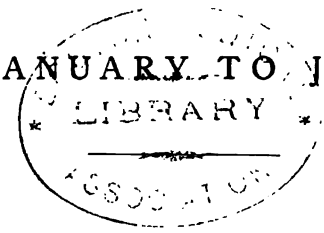
THE

SAINT LOUIS

Medical and Surgical Journal.

VOLUME XLII.

FROM JANUARY TO JUNE, 1882.



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[ESTABLISHED 1843.]

ST. LOUIS:
MEDICAL JOURNAL PUBLISHING COMPANY.
1882.

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THE

SAINT LOUIS

MEDICAL AND SURGICAL

Journal.

VOL. LXII. —JANUARY 1882.— No. 1.

Original Contributions.

ARTICLE I.

NOTES OF CASES IN GENITO-URINARY SURGERY.

—CASE No. IV.—

STRICTURES OF LARGE CALIBRE OF THE PERINEAL AND PENILE URETHRA.—OBSTINATE PROSTATO-CYSTITIS.—INTERNAL URETHROTOMY, FOLLOWED BY BLADDER-WASHINGS AND INJECTION OF STRONG NITRATE OF SILVER SOLUTIONS INTO THE BLADDER. By W. HUTSON FORD, M. D. of St. Louis.

July 26, 1880. Mr. E. S.—Aet. 32: book-keeper; bachelor; eight or ten years ago had Syphilis, but has long ceased to feel any effects from it. Preputial orifice consists in a hypospadiatic opening just where the frænum is attached to the prepuce. He is circumcised, (Hebrew nationality). Gonorrhœa ten years since, and again some four years ago. Circumference of penis, three inches. Suffers from frequent dull pains in the back, referred to the renal region. Bowels disposed to constipation. After retiring at 10 or 11 P. M., sleeps tolerably well until 4 or 5 A. M., when he is obliged to rise and pass water. During the

day micturition is abnormally frequent, about once every hour. Occasional temporal and frontal headaches. Discolored cicatricial patches on the anterior aspect of the legs attest his syphilis of some years back. His general appearance indicates confirmed chronic disease, and his face is worn and haggard. There is no pain after or during micturition. Pulse 80. Tongue furred. Has never passed any blood by the urethra or anus.

July 27. 9 P. M. Urinates before me; the stream is of moderate size; some hesitation of the bladder; urine pale, sp. gr. 1022. or slightly alkaline. Distinctly ammonical. Full of muco-pus.

No Stone. July 28. Examined for stone with Mercier's sound. No stone. Bladder very little sensitive, not fasciculated.

Aug. 1. Bladder has been washed out twice a day with Borax and Hyposulphite of Soda. The bulb is strongly contracted to 22 F. Whether this constriction is organic or spasmodic cannot yet be said positively.

Lateral Meatotomy. This morning the orifice of the hypospadiatic urethra was enlarged to 33, by *lateral* incisions. B. B. 33 passed down an inch or so; beyond this, 29 only would pass. Bladder washed out twice daily with distilled water.

Aug. 2. B. B. 33 passed down one inch. bladder washings continued.

Aug. 3. C. S. 26 with some difficulty through the bulb. Urine is now perfectly free from odor.

Aug. 4. B. B. 23 with difficulty through bulb. There is a series of irregular contractions of not less than 28 beginning just behind the scrotum, and extending to an inch behind the glans; the bulbar region is quite free from stricture.

The urine is alkaline, slightly cloudy, depositing fragments of mucus, but not strings. It is almost devoid of odor. He continues to take Bethesda Water and Benzoate of Soda and alkali. Advised section of the stricture by internal urethrotomy.

Aug. 5. Cholagogue pill to-night. Quinine grs. v. four times a day.

Aug 6. B. B. 33 down one inch. Urine much better colored. C. S. 36 went through bulb with moderate facility.

Aug. 7. Urine still improved; fairly acid.

Aug. 8. Urine clearer of shreds and mucus. Passed water yesterday but once in two or three hours. The pain in the loins is decidedly abated. Urine perfectly free from odor. Com-

plexion clearer. Tongue still coated, but much less so than formerly.

Aug. 10. Bladder regularly washed out twice a day with distilled water containing five or six drachms of a solution of borax and hyposulphite of soda in its last four ounces.

C. S. 29 passed easily but with pain at orifice.

Aug. 11. Bladder washed out twice to-day. Will divide the strictured bands in front of the bulb to morrow.

Aug. 13, 11 A. M. Internal urethrotomy with Otis' dilating urethrotome. Dr. Wm. Webb assisting. B. B. 27 passed bulb with difficulty. B. B. 29 defined contraction in the perineal urethra, also one in the scrotal region and also one an inch down. B. B. 33 could not enter the meatus. Æther administered. The strictures divided to 36. The hypospadiatic meatus also extended on each side by incisions close to the corpora cavernosa. B. B. 33 passed readily to bulb. C. S. 33 passed easily into the bladder. But little hemorrhage. Cold applications. Quinine, recumbency.

Deep Internal Urethrotomy.

3 : 30 P. M. Had a chill of some half an hour's duration about 1 P. M., after making water for the second time; also some bleeding. Vomited. Applied the perineal tourniquet, and splinted the penis. Veratrum and quinine. Absolute diet.

8 P. M. No further chill. Temperature and pulse normal. Quinine every four hours. V. V. at 9, 12, 4 and 7 A. M. Has not bled. Morphine grs. ¼ at 9 : 30 to-night.

Aug. 14, 10 A. M. Doing finely. No hemorrhage. Pulse 56. Temperature normal. The tourniquet is well borne. Vomited last night, probably under the influence of the veratrum. Ordered quinine grs. v. every three hours. V. V. gtt. v. at 12 and 4 P. M.

Aug. 15. No hemorrhage. Doing finely. Quinine and alkaline diuretic. Vichy water. Urine is red and highly acid.

Aug. 16. Doing well. Continue all medicines. Milk-toast. Soup.

Aug. 17. Doing well; C. S. 31. passed easily. C. S. 34 immediately afterwards passed clearly through the bulbar and membranous urethra without any difficulty. No bleeding. Has had no fever nor chill. Orderered diluents and soda; continues Quinine three times a day.

Sounds 31 and 34 on the Fourth Day.

Aug. 19. No chill, hemorrhage nor fever. Tongue a little

coated. Cholagogue pill to-day, and also to-night. Continues quinine in reduced doses, and the alkaline diuretic.

Evening, 8 P. M. He complains of some pain on the right side of the neck, or the "posterior triangular space," where a diffused swelling is barely perceptible, and some tenderness on pressure exists. This area was painted with Churchill's tinct. of iodine. He also complains of constant pain in the head. The quinine is intermitted for to-night. Temperature and pulse normal. The weather is excessively hot.

Aug. 20. The headache is better this morning. The swelling noted yesterday has existed for several weeks. The urine is very pungent, red and somewhat ammoniacal. Bladder washed out with warm water containing borax mixture. Castor oil.

Evening, 8 P. M. Oil has acted. Bladder washed out. Temperature 100°, pulse 84. Ordered veratrum gtt. v. at 10, 2 and 7 A. M.

Aug. 21. Better. c. s. 33 and 34 passed. Bladder washed out.

Aug. 22. Bladder washed out night and morning. The bilious condition is so marked this evening that an emetic is prescribed of ipecac and tartarized antimony ʒj to grs. j. in ch. iv. This to be followed by a cholagogue pill at 10 P. M., and Ol. Ricini in morning.

Intercurrent Bilious Attack.

Aug. 22. The tongue is much coated and slimy. Pains in the renal regions. Bladder not washed out. Temperature 100¼°. Pulse 84. Ordered counter irritation (Sinapisms) to the back. Alkaline diuretic. The oil acted two or three times. Milk and lime water only.

8 P. M. Ordered grs. vi. Bisulphate of quinine every four hours. It is evidently a malarial complication. Bladder washed out.

Aug. 24. Somewhat better. Temperature 99.5. Pulse 80. Terminal stricture dilated to 33. Allowed a few fresh oysters and some buttermilk.

8 30: P. M. Sleepy. Sweating heavily. Pulse and temperature normal. Ordered grs. vi. quinine at 9 P. M., at 2 A. M. and 8 A. M

Aug. 25. Better. Urine more natural. Continues quinine. Saline Laxative. Diet.

Aug. 26. 8 P. M. Salts has acted well. Altogether better to-night. Bladder washed. Quinine grs. vi. at bed-time, and at 7 A.M. to-morrow.

Aug. 27. Sounds 33 passed bulb. 34 down to bulb. Is much better. Bladder washed out once a day. Quinine continued. Sounds Passed.

Aug. 28. Better. The urine is still pungent and somewhat muddy. Will make an injection of nitrate of silver this evening. Injection of Nitrate of Silver.

7: 30 P. M. Doing very well but weak. Two ounces of a ten grain solution of nitrate of silver injected into the bladder. Hot water controlled the pain, which was moderate.

Aug. 29. Sitting up. Some increase in frequency of micturition last night. Pain lasted altogether until 3 A. M. Is better this morning. Tongue clearing.

7: 30 P. M. Urinated five times since morning; a few drops of blood passed towards the end of micturition, each time except the last. Ordered Hot Sitz-bath, Diluents and Sod. Continue quinine grs. vi. twice a day. Temporary Exaltation of the Cystitis.

Aug. 30, 10 A. M. No more blood upon urination, but an increase of the mucus in the urine, and of the frequency of micturition. Continue recumbency. Castor oil.

7: 30, P. M. Oil has acted. The urine looks better. Ordered a suppository of morphine and belladonna at bed-time.

Aug. 31. Better. Urine looks clearer. C. S. 32 and 34 passed. Is to wash out the bladder once a day. Diluents and Sod. Iron tonic. Sounds Passed.

Sept. 2. Calls on me looking much clearer. Urine without odor and greatly improved. Bladder washed every morning.

Sept. 4, 10 A. M. C. S. 33 and 34 passed. The urine looks better. He leaves by my advice for Waukesha, Wis. this evening. Ordered to wash the bladder every day. Sounds passed.

Sept. 13. Returned much improved. Urine very nearly normal and neutral. C. S. 33 passed. Will have a course of sounds every other day for some remaining prostatic tenderness and pain in the back. Improvement.

Jan., 1881. His urinary troubles have all disappeared. He has gained astonishingly in weight and appearance. His complexion is now of good color, and he states that his health is very good indeed. Complete Recovery.

Article II.

The Histo-Pathology of Scarlet Fever.* By Dr. G. V. Black, of Jacksonville, Ills.

[Concluded.]

We will now examine the evidences that the affection extends also to the alimentary epithelium. Thomas says very truly that "the process has not ended when the eruption pales. Other disturbances which have arisen during the inflammation of the superficial cutaneous layers, must run their course. These result in an excessive formation of new epidermis which is followed by an abundant exfoliation." If this result be found in the alimentary tract, we have good reason for believing that processes similar to those of the skin have been in operation. Those dying in the midst of the rash do not show a rash upon the mucous membranes of the alimentary tract; nor do they on the skin for in a very short time after death, the surface pales, all appearance of the rash is gone, and we suppose the same thing to occur on the mucus membranes, as may actually be seen in the mouth and throat. Thomas says that by injecting with a colored fluid, a picture of the exanthem very similar to that in life may be reproduced. Here we have a very peculiar proof that the inflammation is only of the epithelium, and that the blood vessels are not involved. There is no stasis as in ordinary inflammations, and after death the expanded vessels, though empty and collapsed, are easily refilled by injection, reproducing the rash. Now, by these various means, we find that observers have furnished the facts which show that the exanthem is not confined to the squamous epithelium, but that the columnar epithelium of the alimentary tract is very generally, if not always involved. It may be that the involvement of this epithelium is in most Scarlet Fever epidemics, very slight, perhaps not sufficient in the majority of cases, to give serious trouble; yet in individual cases, and in some epidemics this is a serious feature of the disease. Very serious cases occur with but very slight, or no rash upon the skin. Several observers, Fenwic, Hiller, Niemeyer and others, have found the gastric tubules filled and distended

with fatty, and granular, and epithelial casts, the same casts in the contents of the stomach, also, casts of the tubal glands of the small and large intestines have been found in these cavities.

So prominent did Dr. John Harley of London, find the intestinal lesions in an epidemic of Scarlet Fever, that he considered there was a close resemblance between this disease and enteric fever, so close indeed, that he seems to have considered the first stages of the two diseases identical. It is almost certain that in those cases of scarlet fever ending in sudden death, without the appearance of the rash, we have a very severe epithelial inflammation either in the alimentary tract, or in the kidneys, or in both. The dangerous character which the disease assumes when the kidneys are involved, is well known. Niemeyer states that he has in almost all cases, found the affection of the kidneys to be as intense as that of the skin, and of the same character. We have abundant evidence, however, that there is a wide difference in the different epidemics as to the severity of the inflammation in the several localities. For instance, one epidemic may furnish the anginous variety; in another the kidneys may be prominently affected; while in a third, the inflammation may be confined almost exclusively to the skin. There is, however, an evident error in the minds of many physicians in regard to the nature of the kidney affection. It seems to be regarded rather as a complication, when in fact it is an intrinsic factor, and not a mere accidental complication of the disease.

The fact that in many cases it is not a grave feature of the disease, by no means makes it an accident of the affection. It is almost always present, though often mild. And there is good reason to think that it figures more largely in the early part of the affection, than is generally believed. In many a patient, who when attacked, passes rapidly into convulsion and coma, and quickly dies, the failure of the kidneys is unmistakably the underlying cause. Early in the disease, the stage of eruption, when the epithelial inflammation is in progress in the kidneys, if the process be mild, these organs still perform their functions; the urea is excreted, and no great difficulty is experienced, but when the inflammation is so severe as to interfere with their functions, the worst results follow. Autopsies in these cases, reveal the profound disturbances of the epithelial elements of the tubules. Not only in those cases in which the disease has reached the stage of desquamation, but during the stage of erup-

tion. Here, says Thomas, "The cortical substance is particularly the seat of changes, the morbid process begins in the Malpighian bodies, and then follows the course of the convoluted tubules." This description expresses the exact counterpart of what we have described, as occurring in the sweat glands. Traube found a rapid proliferation of the cells of the tubules throughout their entire length, and that these cells undergo an albuminous degeneration. E. Wagner describes the epithelial cells of the tubules as clouded, enlarged, changed in position, or even entirely destroyed; or frequently pushed off so that the tubules which besides them, contain white and red blood corpuscles, as well as various quantities of cylinder shaped exudation masses, were sometimes completely blocked up. These disturbances in an organ constituted as the kidneys, are of the gravest character; the entire organ becomes hyperæmic and distended with blood, and a more or less intense inflammatory process is set up in the general substance of the organ, resulting in the rapid proliferation of connective tissue elements between the tubules, especially masses of fusiform cells which in the worst cases, undergo speedy albuminoid or fatty degeneration.

These changes interfere with the function of the glands in direct ratio with their severity. If the inflammatory process be mild in the epithelial cells, we will have but a passing hyperæmia with no marked functional disturbance. The urine will show some albumen and an unusual abundance of renal epitheluim, some exudation globules, and a few blood disks, all of which will pass away in a few days without producing any especial symptoms. We think the rule is, that inflammation of the kidneys give rise to no pain referred to the region of these glands. Patients die of uræmia, who have never complained of pain.

It is, however, in the later stages of scarlet fever, during the period of desquamation that we usually see the most disastrous effects upon the kidneys. This is a different affection, arising from a different cause. It is properly a resultant or secondary affection dependent upon the peculiar anatomy of the organ. brought about in a mechanical way during the desquamation of the epithelium of the tubuli uriniferi. If the desquamation be abundant, the long and tortuous tubules are unable to free themselves of the accumulations of cast-off cells, and become blocked up. This in turn gives rise to an inflammation due merely to this mechanical cause which is not specially epithelial, thoug

during its continuance it prevents epithelial repair. Here now, we have an ordinary simple inflammation with fibrinous deposits in connection with an over abundant epithelial desquamation; hence, we have the cast off cells glued together in the form of casts of the tubules, giving farther hindrance to their exit. To add to the difficulty, the whole organ becomes distended with blood in proportion to the intensity of the inflammatory process. This tends to compress the tubules, and render it still more difficult for them to rid themselves of their abnormal contents.

Let us try to illustrate: Suppose we take a membranous sack, and into it we pass three rubber tubes representing an artery, a vein and a tubule of the kidney. The one representing the tubule is wound about several times within the sack, and its inner end is stopped with a bit of sponge through which a fluid can percolate representing a Malpighian corpuscle. Now, suppose we fill the sack with fluid by the tube representing the artery, and allow it to escape by the tube representing the vein. A portion of the fluid will percolate through the sponge representing the Malpighian corpuscle and escape by the representative of the tubule. Now it will readily be seen that if the pressure of the fluid within the sack be raised to a certain point, the tube representing the tubule will be collapsed, preventing the escape of the fluid by that route, and if an obstruction be placed within it, anywhere along its course within the sack, the walls of the tube will be compressed upon it, and prevent its passage along the tube. The best conditions for the exit of this obstruction, will be a comparatively low pressure of the liquid within the sack, allowing the fullest expansion of the tube.

This is the type of the conditions present in the kidney, in the secondary inflammation of scarlet fever. An irritation is first caused by the obstruction of the tubules by the cast-off epithelium. Then, according to the general law of irritation and inflammation, a greater amount of blood is called to the part. The kidney becomes hyperæmic and swollen, thus compressing the tubules which are already struggling to free themselves of their epithelial obstructions. What shall be done in this condition? The history of scarlet fever shows that thousands of children die as the result of this renal congestion. The one thing to do, is to lessen this blood pressure; and this should be done at once, and most thoroughly. It matters not just how it be effected, so it is done, and done at once. For this purpose, veratrum viride

given until the heart's action is reduced to the lowest limit compatible with safety, has proved itself more prompt, efficient and safe than any other agent. This effect should be maintained until the tubules have freed themselves from their obstructions which they will usually do in a few days, and the difficulty which threatened a speedy death, is ended.

Inquiry into the condition of the other thelia, is important. In reference to the pavement or serus endothelium, and the endothelium of the blood vascular system, we have seen no report whatever, except that they are found healthy, which would undoubtedly be the gross appearance. As yet we have read no author who reported having critically examined these structures to determine whether or not the characteristic changes could also be found there. The fact that these thelia are widely separated from the squamous and alimentary in both their origin and function, and no affection of them having been noticed, would seem to indicate their complete exemption. Yet the very profound disturbance of the circulation in this disease holds out a suspicion that they may be involved. Special examinations in this direction are certainly to be desired.

Of the respiratory epithelium, we have more definate information. The question, of whether or not the inflammation of the throat extends into the air passages without the presence of true diphtheria or croup, is one which has been much discussed. Without entering this field of discussion, we can easily glean from the abundant writings, the facts as to the order of the involvement of these structures. The evidence is satisfactory that the respiratory epithelium is exempt in scarlet fever, except at, and extensions from, those points where it comes in contact with the squamous epithelium. At these points, it will be remembered, there is more or less change in the type of each of the thelia as they approach each other, constituting as it were, an intermediate type. Notwithstanding this, the scarlatinous process appears not to cross the lines so readily as would be supposed, and in a very large proportion of cases, the inflammation extends just to this line, and no farther. But if the inflammation be very severe, or the sub-epithelial structures become involved, then the inflammation passes over to the respiratory epithelium. When this epithelium does become involved, the nature of the changes which take place, differ in character from those occurring in the squamous variety, in that the tendency is to the rapid destruction

of large portions of the epithelial covering, and inflammation and suppuration of the sub-thelial structures. The point of crossing is almost always over the border of the soft palate, or in the pharynx, with rapid extension from behind forward, usually involving both the posterior and anterior nares in a very destructive inflammation, which in severe cases, destroys large portions of the columnar ciliated epithelium and gives rise to an ichorous pus. It thus leaves a surface denuded of its epithelial covering which heals with difficulty, and is prone to leave permanent nasal catarrh.

The large number of cases of the loss of hearing which results from scarlet fever, leads us to say a few words on that point: The Eustachian tubes and the greater part of the tympanic cavity, are lined with the respiratory epithelium, and it is undoubtedly by extension of the inflammation along the tube, that the ear becomes involved, which not only threatens the loss of hearing, but is a point of danger to the life of the patient. When the dividing line is once crossed, and the respiratory epithelium becomes involved, the invasion of the Eustachian tube, readily occurs and the inflammatory process advances to the middle ear, setting up an ulcerative process with the formation of pus. The swollen condition of the Eustachian tube has shut the door of exit, and the pus is retained in the tympanic cavity, and by pressure causes a general inflammation of the middle ear; the drum becomes bulged, and finally yields to the pressure of the pent up pus which finds an outlet through the external meatus. But it sometimes happens that the pus finds an exit through the very thin partitions into the brain, causing the death of the patient. For these reasons it is important that the practitioner should be provided with the Otoscope and puncturing lance; and that he examine frequently and carefully the membrana tympani in all suspected cases, and whenever the membrane is found bulging, paracentesis should be at once performed. Such a course will not only save life occasionally, but will relieve suffering and diminish the number of pupils in our institutions for the education of deaf mutes. The crossing of the line at the glottis is of much more rare occurrence, but when it does occur, it is characterized by the same destructive inflammatory process as is seen in the nares. Now, as to whether this involvement of the respiratory epithelium and the subepithelial structures should be regarded as a diphtheritic complication

is a question we will not now discuss. The point has been discussed at length, both in the text books and journals, without resulting in any uniformity of opinion among medical men.

When the subject is viewed from a Histo-pathological standpoint, the lungs must be looked upon as tubular glands. Their formation is effected in the same manner as other glands. There is a differentiation of its epithelium which separates it widely, both histologically and physiologically from the epithelium from which it was originally derived. Hence, its involvement in scarlet fever, is a result of contiguity rather than any special affinity of the disease for it.

The involvement of the tonsils, and post-lingual glands, or follicles, is a point of much interest, as being the most common point from which serious inflammatory lesions arise; and as it seems to me, often determines the involvement of the respiratory epithelium, by first communicating the morbid process to the connective tissue. We must examine for a moment, the compound character of these glands. Around the dorsum of the root of the tongue there is a multitude of small tubal glands, with quite narrow ducts, which dip down into the sub-epithelial tissues. Their lining is an indipping of the rete Malpighii. Each of these little tubes has in immediate justaxposition with its membrana propria a setting of minute lymphatic glands, entirely surrounding it. The structure of the tonsils is much the same, but here the glands are much more voluminous. These lymphatics present a striking likeness to Pyers' patches in the small intestines, and according to the statements of various authors, not unfrequently ulcerate in typhoid fever. Now it seems that when the epithelial inflammation is severe in this locality, it is communicated to the lymphatics surrounding these tubes, both on the root of the tongue, and in the tonsils. These become swollen rapidly, and are very likely to ulcerate, and extension of the morbid process to the adjacent connective tissue, and through the medium of the lymphatics is the result. This gives rise to what is known as the anginous variety of the disease which is always to be dreaded on account of the swelling and ulceration of the lymphatic glands about the throat and neck. The lymphatics are especially liable to secondary inflammations from the nature of their function, and their relations to the epithelium at this point increases that liability. The contiguity of the parotid glands to those lymphatics most liable to inflammation, has given

rise to the opinion that they are especially liable to attack. This, however, is an evident error. Considering the amount of inflammation in their immediate neighborhood, it is not surprising that they should occasionally become involved; but post mortems generally show that they have escaped. The comparative freedom of these glands together with all other lobular glands, the clinical history of the disease and post mortem examinations, seem to prove beyond question. This is somewhat surprising when we consider their origin, and the derivation of their epithelium directly from the muco-squamous, which is usually so profoundly affected. However, we must remember that the epithelium of all lobular glands, is very profoundly modified both in form and function. So far as we are able to discern, the lobular glands throughout the body are no more affected in this, than in other severe fevers. On the other hand, the tubal glands formed from either the squamous or alimentary thelia are involved as uniformly as the thelia from which they are derived.

THE FEVER in scarlatina is especially intense, and constitutes a leading characteristic of the disease. This does not always seem to correspond with the intensity of the rash on the skin, but as we have remarked, it seems to be closely related to it. The severity of the epithelial inflammation may be in the alimentary canal, or in the kidneys, and not be apparent; or it may be confined to the glomerules of the sweat glands, and escape prominence. The sweat glands, it must be remembered, have as one of their functions, the elimination of superfluous heat from the body; hence, their greater activity when we become heated in warm weather, or in unusual physical exercise. This is one basis from which we may do something toward accounting for the great increase of temperature. Another is the serious nature of the lesions, involving as they do, such large tracts of tissue. When we think of the involvement of the entire surface of the body, the alimentary tract and urinary system in an inflammation of their functional tissue, we should not be surprised at grave constitutional disturbances. What the effect of the scarlatinous poison may be upon the blood itself, we have no positive data for determining. It does not seem to differ from the condition found in other affections characterized by great heat, and therefore does not offer, so far as is yet discovered, any peculiarities attributable to the direct effects of a blood poison.

The great elevation of temperature accompanying scarlet fever, is one of the chief sources of danger. There seems to be but little doubt that death often occurs directly from sunstroke, or as a result of over heat upon the nerve centers. There are no typical lesions of the nervous system in this disease. Authors who have made extensive post mortem examinations, agree that the nervous structures are found healthy, with the exception of occasional slight congestions. Yet, severe nervous phenomena are of frequent occurrence; we therefore conclude that these are due to the intensity of the heat coupled with the extreme arterial excitement. This however, is sometimes due to uræmia. Indeed, we are inclined to the opinion that this is much oftener the case than is generally thought, by writers on this subject. This opinion is based upon the results of post mortem examinations, and upon the clinical history of the disease in its acute stages.

Scarlet fever often leaves characteristic markings upon the teeth. The enamel of the teeth is derived from an ingrowth and differentiation of the rete Malpighii of the muco-squamous epithelium of the mouth. If the fever occurs while the enamel is forming upon any particular teeth, a mark is often left encircling them at a point where the cells, then at a certain stage of growth, have been distroyed or imperfectly developed. Suppose the line to run around the middle of the central incisors, it will be nearer the cutting edge of the laterals, and perhaps just touch the points of the cuspids. In other cases it will mark the first molars alone, perhaps robbing them of their cusps. The enamel begins its formation in these first of all the permanent teeth. If the disease has occurred later, the line may be seen crossing the bicuspids disappearing under the gums as it approaches the frontof the mouth. Later still, the second molars alone will be marked. This effect upon the teeth is not constant and furnishes no indication as to the severity of the disease in the individual case, giving another indication of the habit of the disease of spending its force, sometimes in one place, and again in another.

In conclusion we may sum up, by saying that scarlet fever is a contagious, epidemic disease, communicated and propagated by a specific poison; the first effects of which are seen upon the constitution at large, acting probably through the medium of the blood. The characteristic lesions of the disease, are found in the squamous epithelium of the skin, and the columnar epithe-

lium of the alimentary tract, and in their glandular derivatives which have been least changed in form and function; which consist of the tubal glands, the sweat glands, the tonsils and the post lingual glands derived from the squamous variety. The follicles of the stomach, the Lieberkühnean glands of the intestine from the columnar, and the kidneys, which are probably derived from the columnar also.

When the inflammatory process passes from the tissue of its election, it is usually found to be to the respiratory epithelium in the pharynx and larynx; and to the lymphatics, and thence, to the connective tissue in the tonsils and post lingual glands. In each case the departure from the tissue of its election, there is a radical change in the type of the inflammatory process.

The dangers of the disease are :—

1st. Life is threatened in the febrile stage by the effect of the excessive heat upon the nerve centers.

2nd. In the early stages by the involvement of the kidneys and consequent uræmia; and in the later stages, by both uræmia and dropsical effusions into the important cavities.

3rd. The involvement of the lymphatics of the throat and neck, threaten life by the formation of abscesses prone to be followed by pyæmia and exhaustion.

4th. Life is threatened by the involvement of the respiratory epithelium, and its underlying connective tissue. The involvement of the Eustachian tubes threatens; 1st., the loss of hearing; 2nd., life by the escape of pus into the cranial cavity.

Article III.

Medical Orthodxy.* By T. D. Washburn, M. D., of Hillsboro, Ills.

An attempt to define, outline and apply to practice, ethics and legislation. Rather a large contract you say, I fully realize it. That a country doctor should attempt to define what medical orthodoxy includes, mark out its boundaries, portray its present condition and future possibilities, seems presumptuous; but if I succeed in arousing legitimate discussion and drawing out the various shades of opinion on this pregnant topic, I shall have done much to help to a better appreciation of the difficulties which surround it.

Most of you will admit there are some dogmas in medicine, as well as religion. We shall also concede that most dogmas have a certain element of truth in them. Now, if we can separate the true from the false, we shall have secured that much for orthodoxy; for orthodoxy is simply, true, sound doctrine. All medical men admit we have sects, or systems in medicine; (always excepting the venerable *Boston Medical and Surgical Journal*). These sects or systems have arisen from some cause. Now, I firmly believe the sect styled "regular," to which the label of "allopathy" has been attached by its opponents, embodies the most science and truth; still the most loyal will admit it has had many errors, that it is greatly modified, and in many respects, vastly changed. You may assert that medical science is a unit, and only embodies truth; but it is not a complete science, it is not matured; and to say that we, the sagacious, the genuine regular, alone represent, embody and contain all, is assuming what is not yet proven. When was regular and infallible medical science born? Who was present at the delivery? What nationality claims it? Not Switzerland, nor Germany, nor France, nor England! It was not born at all; like Topsy,

* This paper and the discussion following it, form a part of the transactions of the Tri-State Medical Society, which met in St. Louis, Oct. 25th, 26th, and 27th, 1881.

"it grew." Its history goes back beyond the days when Dr. Isaiah applied the lump of figs to relieve his distinguished patient, King Hesikiah. Galen did not claim it, Paracelsus 1200 years later, was a bright and shining light, and had as much to do with its conception, or gestation, but he was not the father; he was as consummate a quack and irregular as anything ever begotten in the nineteenth century. It is a question of no little interest, to trace out the influence other sects have had on our own, but we cannot go into detail.

DOGMAS.—We can acknowledge this much, that Thompsonianism, with all its ignorance and bluster made a fearful onslaught on the use and abuse of calomel and the lancet, and when the smoke of battle cleared away, if not "*hors de combat*," we were more or less crippled. Subsequently, when Homœopathy landed from a foreign soil and divulged the ravings of the most noted lunatic the medical world ever saw, we learned rapidly some lessons we had grossly neglected, that nature was an immense power in the treatment of both acute and chronic disease; true, we were gradually skirmishing on that line, Prof. Bigelow of Boston, and Chambers of England, were pioneers in reaching the same truths, which the nihilismus of Hahneman forced upon us. Both these sects have had an influence on regular medicine. Unfortunately for us and the public, they managed to associate moral *reform* with their system, and thus created a "boom," a force and power, the American mind never stopped to analyze, but accepted as real. This gave them position at once, like Mormonism in morals and politics, which our wisest efforts failed to eradicate. One other item in this connection which greatly enhanced their strength; they boldly advanced to the front and scattered broad-cast their views in the press; seizing our vulnerable points, they manipulated the public with essays and pamphlets and made things lively by their fulsome brag and shrewd manner of attack; while old regularity disdaining to fight with such weapons, and its venerable ethics forbidding any ventilation of their own practice, sat quietly in its citadel, conscious of its power, never ventured to repel an assault, but calmly waited to see one after another of its barricades broken down, its outposts driven in, and the enemy smashing things generally.

In the meantime, these reformers (?) were joined by fresh

recruits, some deserting from the old school; but they soon began to realize that a more perfect organization was imperative. They began purging its own ranks of some of its worthless material and bold nonsense, and retiring from positions which they could not hold, they seized for a rallying point, "*botanic remedies*," and labeled themselves "*Eclectic*." Here and there a medical institution termed college was organized, and as a diploma was a passport to greater respectability, they were freely given like the rains of Heaven to the just and unjust, the learned and unlearned. Bungling attempts were made to create botanic literature and text books, and thus, with brazen assurance they demanded and secured recognition; but with all this pretense and bluster, the old land-marks remained. Anatomy, chemistry, physiology, pathology, obstetrics and surgery had a rock basis and stood immovable. A knowledge of these was indispensable to any intelligent and successful practice.

All this time regular medicine pursued the even tenor of its way, stimulated somewhat by the pungent criticisms of its opponents, they gradually weed out the errors and refuse of the old system, and challenged the scholar and all thinking men to any adverse criticism. They proudly pointed to a century of statistical evidence manifesting their wonderful progress and development, and claimed unanswerably, their recognition as the true friends of science and conservators of all that was essential and meritorious in medical theory and practice. Gradually these diverse systems, dogmas and sects have drifted into close proximity. They recognize the necessity of the foundation elements which I have mentioned. You find our authors on their shelves; they prescribe from the same materia medica. Under these circumstances I see no objection to their children walking in procession with ours at the same pic-nic or festival. While I have shown as much hostility as any one, both in personal debate, the Society and our legitimate organs, the medical journals, my worst opponent will concede I have based my argument, not so much upon the peculiar Sect, or its advocate, as the ignorance it fostered, and the light it shut out, upon the chicanery and sham with which it was associated. But dearly as the American people love shams and admire cheek, when it becomes a matter of life or death, when it affects them personally, they begin to make a distinction between ignorance and good sense; between a milksop and genuine culture.

Unfortunately for the regular profession, while deeply conscious of its own merits, in its anxiety to scoop up what might wander to other folds, it so far forgot its high mission as to leave the *bars of entry* so low that *mongrel* stock became fearfully mixed with pure bloods.

Now, we may as well be frank. This was not the fault alone of the *cheap* schools, the nominal college which has done so much to demoralize and abase the profession, but the guilt lies largely at the door of the practitioner (and lies there to-day,) who encouraged some imbecile, or *half* educated young man to enter his office, and thus endorsed him to the college and the world. Thus the public were dazed, bewildered and puzzled; no wonder they failed to recognize the label of *regular*, when the *irregular* had brains and gave evidence of culture. Yes, our chickens have come home to roost, and no one to blame but ourselves. If we would not sweep before our own door, we have no business to howl about the dirt in front of our neighbor. No ethics can make ignorance respectable; no stamp enhances the value of spurious coin. Again, few realize what legitimate medicine has had to contend with. Of all science, *medical* science is perhaps the least perfect. It has had the greatest obstacles to overcome; the most insurmountable bigotry; the most venerable errors. Philosophy, religion, government; the whole frame work of society have been barriers to its progress.

No longer ago than the time of Galen, or even Paracelsus, the art and science of medicine was much in the condition of the earth at the time of creation, "without form and void," even the mud sills had not been found, much less the rock basis on which, with patient labor, the present grand superstructure has arisen. But notwithstanding its wonderful advance and maturity, we are still startled from time to time with new truths and brilliant discoveries which modify the old, and must be built into the new. Surely then, we have some difficulty in defining a standard of orthodoxy which shall fit all along the ages, and to which we can appeal as invulnerable amid the crumbling of Empires, and the shock of time! We can even afford to be a little tolerant toward our co-laborers who may differ with us, as we survey the past and realize what a chaotic condition we were in. How bitterly we have contended for tradition rather than truth, and how often have we been compelled to accept as truth, what for years we ignored and pronounced false.

How slow to accept even Harvey's demonstration of the *circulation!* And the grand boon of vaccination by Jenner, with all its benificence and promise, was fought inch by inch by medical Solons. We are unwilling to appreciate what does not reach us through the most legitimate channels; we cling to the old. The "Moss covered bucket," and "Old arm chair," never lose their grip on us.

And gentlemen, our acknowledged leaders and brightest lights in the profession we dare not follow, if they have the temerity to announce something novel and unexpected. Virchow, when he advanced the cell theory, and backed it by argument and demonstration, was thought to be slightly visionary. How were the patient labors of Laennec in rational and physical diagnosis, and that invaluable application of anscultation to diseases of the lungs rewarded? With scoffs and sneers; and years elapsed before it was adopted and approved. So too, Louis on fever, settling once for all, the distinctive type of typhoid. Our own countrymen, Caldwell and Simms, in their special study of ovariotomy and vaginal fiistula, startled us by their boldness, and reluctantly had our approval. Surgeon General Hammond, when he issued that order on calomel, gave great offense, lost his position, and now a score of years later, receives scanty justice for his wise and timely action. Again, Brown-Sequard seems likely to disturb some of our orthodox notions in regard to the nervous system, its laws, philosophy and manifestations, and it may be well to watch that Jewell of a man in Chicago, as well asthe Hughes of light which strike us from St. Louis, or they may land us in unblushing heterodoxy.

With these facts, this fragmentary historical record before us, you begin to realize the status of medical orthodoxy; that its principles applied to practice, cannot be put in a cast-iron formula, but advancing and developing with each successive age, we claim the prerogative of modifiing and perfecting the same, as the light and truth of science shall dictate. Shall we still persist in enforcing the most rigid supervision and discipline on such as dare to think for themselves? Have we not reached the conclusion that *knowledge* deserves respect and recognition? Is not knowledge the *sine quâ non*, in all that pertains to medical science, as well as all science? And because one man's knowledge of the *same facts* leads him to different conclusions, convictions and results from our own, must he be ostracised and

tabooed? I like a well developed and firm spinal column, but why not have a little elasticity in this medical back-bone which reaches from the most erudite professor in our most cultured metropolis, to the hardy practitioner on the most distant frontier? Medieval darkness and ignorance could excuse and palliate such intolerance, but the blazing light of the nineteenth century forbids such an absurdity. Bigotry unadulterated is no worse! Let us at least concede to others, what we claim for ourselves, a manly independence. I met a commercial traveler a few days since; he had ninety different samples of coffee; and it reminded me forcibly of the condition of the profession. Yes ninety different kinds of one article, and no two alike;—that's *us*, the doctors, (genus, M. D.) ninety samples—all have the look, taste and smell of coffee. Well I need not stop to illustrate. Beaconsfield had *three* or more; our honored and revered Chief Magistrate, whose demise threw such a pall of grief and gloom over the Nation, had as many, and every city can boast of a score and they only differ like coffee, in their nativity, quality, flavor and richness. Some of you strolled through that wonderful art gallery at the Centennial, and may remember that vivid picture of Rizpah watching her gibbeted sons to scare away the birds of prey by day, and the wild beasts by night, for weary weeks. Some watch medical heresies with much the same vigilance. There is another striking picture I have not seen on canvas, where a great sheet is let down from Heaven, wherein were four footed creatures, wild beasts, crawling reptiles and birds of the air; and a voice comes to the bigoted Peter "rise, kill and eat;" what dismay; what horror in his resolute face; but when he learns a higher power has cleansed, even these, he submits and goes on his mission to the gentiles in a manly way. Now brethren we have a little of this old Jewish intolerance. The medical gentile gets a wide berth, but seldom justice. This accursed caste which taints everything we touch, in religion, politics and social life, has not been thrust out of our medical sanctuary. This is not the spirit of orthodoxy!

A contributor to one of our encyclopedias has expressed the sentiment of the best element of the profession, when speaking of Homœopathy, he says; "The action of emetics in some kinds of indigestion, and of rhubarb in some kinds of diarrhœa, are familiar examples in daily use, showing that ordinary practice is not regulated by any blind prejudice against what is called the

homœopathic law of *similia similibus curanter*; but in these cases, the physician does not commit himself either against or in favor of the law, but sets it aside as a mere metaphysical abstraction, having nothing to do with the real principle of the cure, which is to be found in common sense and experience, applied to the facts of individual cases, and groups of cases.

"The true physician is not a sectary; he disowns all artificial formulas of cure, exactly as he disowns homœopathy; and he especially disowns the nickname of allopathist invented for him by Hahneman. His belief in remedies is not founded on extreme generalizations, and he refuses to be limited in his practice by any other technical rules, than those derived from a fair view of facts investigated on the ordinary principles of positive science." The same views apply to all exclusive dogmas and are the settled convictions of all well balanced minds.

It certainly is a delicate task to define what constitutes genuine orthodoxy in medicine at the present time. The foundations are being moved, a mighty upheaval is going forward, and some of these old fogy medical notions, and fossil leaders will be upset if they do not yield to the spirit of the age, and give up their antiquated and imbecile traditions and accept untarnished and immutable truth.

[TO BE CONTINUED]

Article IV.

The Danger of suddenly Withdrawing all Opium from Opium Eaters. By C. H. Hughes, M. D., of St. Louis.

Within the past month two cases in the persons of medical men have through their friends for they were too helpless mentally to seek aid themselves—sought relief from me for the dangerous effects upon their minds of the sudden and complete cessation from the use of morphine to which they had become chronic habituates, each consuming as near as could be ascertained, about ten grains of the sulphate daily. These cases recall a great many others of a similar character that have come under observation of late years and remind me of a duty too long neglected of sounding a note of warning on the subject.

The morbid cerebral condition of chronic meconism is far preferable to the profound mental aberration—frequently delusional mania after dementia—which, often supervenes upon the sudden stoppage of large habitual doses and sometimes follows the quitting of very small ones.

If only intense pains, catarrh and diarrhœa follow the abrupt abandonment of the drug the opium eater may be safe enough. He may retrace his steps to make the trial again under more favorable auspices in an institution especially adapted or under the direct care and supervision of a physican of some experience in these cases; but if dementia follows the unassisted self attempt, the victim is helpless and in danger of permanent injury. Besides the unadvisabilty of inducing a single attack of insanity under any circumstances because, not of its immediate peril but of the predisposition which it engenders to another attack, to fall into the hands of even the most skillful physician under such circumstances is extremely embarassing to the physician who treats the case. He is deprived of the exact knowledge as to the amount of the drug taken as, to the natural mental characteristics of the individual and of the benefit to be derived from

inquiring of the patient as to rational symptoms etc. so helpful to him in many respects in the treatment.

The Opium habit should be abandoned by nearly all who indulge in it. I will not all for there are times and cases when and where abandonment is more perilous than continuance, but when it is resolved to give it up it should not be recklessly thrown off regardless of time or place or season. The giving up of the terrible indulgence should be deliberately resolved upon, a judicous medical advisor selected, who is to be the constant companion of the victim during his ordeal, business affairs should be arranged so that they need not be attended to for a while—not less than six to eight weeks of respite being provided for—and the habituate should if possible go away from home either to the house of some physician fully posted in combatting the symptoms arising from the withdrawal of the habitual influence of the narcotic on the nervous (and medical men so informed are comparatively few) or to an institution for the treatment of these cases having all the necessary nursing, skill remedial aid at hand for use in every emergency.

The peculiarity of chronic meconism is that like a stealthy and skillful villain, it wounds without attracting the victim's attention till the mischief is consummated and covers up the destruction made so that detection is not immediate. Each successive dose covers up the mischief of its predecessor and when the poison is no longer repeated the danger to the organism is revealed. It is then fortunate for the victim of sudden withdrawal if only the sensory or motor tracts of the cord reveal the harm they have received in pain or tremulousness, or only the sympathetic system shows its injury in emesis, profuse perspiration or diarrhœa that can be self managed by the well informed medical victim; but if the damage cortex reveals extensive injury in delirous mania or dementia the situation of the victim is alarming and perilous, for the time at least and the only recourse in many cases is to cautiously feel our way back with the patient to his starting point (whatever quantity that may have been) of abrupt abandonment and begin with him again with better understanding and better preparations for the combat. A patient a medical man once consulted me from another with city less than a hundred dollars in his pocket for all contingencies saying he had been taking half a grain of morphine daily and had come to the city to spend a week or two and get

rid of the baneful habit. He lied as most of these patients will on this subject. The next day he had delirium and no attempt on my part had been made to reduce this amount. On the contrary, suspecting that he had misconceived what a trial was before him and deceived me, I began to increase the amount and he did not regain the normal use of his faculties till he had reached a daily dose of ten grains. It is perilous to suddenly withdraw large amounts of opium in chronic habituates without the victim being well prepared and surrounded for fighting grave symptoms. It is possible thus to precipitate or irremediable insanity, as I have seen in more than one instance, though by judicious management the patient may generally be brought back to sanity; but the most certain evil of abruptly breaking off, is the damage to one's reputation and business.

I may add in conclusion of this hasty note, that to rely on any *one drug* like the vaunted *Erythroxylon Coca* is a delusion and a *snare*.

Translations.

Article V.

FROM THE FRENCH.

Excerpts from Late French Journals. [Translated for the Journal.] By A. H. Ohmann-Dumesnil, A. M., M. D., of St. Louis.

Treatment of Phthisis.—M. Debove had in his service, a phthisical woman who could no longer support milk, and he decided to feed her through an œsophageal sound. By this means he administered at first a litre of pure milk, later meat and eggs. He succeeded in injecting two litres of milk, 200 grammes of meat and ten eggs in a day. The most singular part is that the patient's appetite returned, she increased in weight 100 grames a day, sleeps well, and night sweats have disappeared.—[*France Médicale.*

Chloral Hydrate in Toothache.—According to Sporer it suffices to take a few small pieces of chloral, about 5 centigrammes, and crush with cotton and introduce into the painful cavity. The chloral dissolves, and the pain is dissipated in a few minutes. It is a good means of curing dental caries.—[*Paris Médical.*

Cure of Glaucoma by Equatorial Sclerotomy.—M. Nicati makes a sub-conjunctional puncture with a bistouri carried to the vitreous body. This latter must protrude through the wound. If this condition of hernia can be made to persist a cure of the glaucoma will be effected, according to the author. This operation brings about a sedation of the pains, in diminishing the exaggerated distension of the ocular globe; but it does not cure the glaucoma, it merely obviates the consequences of that affection.—[*Ibid.*

Creasote for Sycosis.— Sycosis, which is so often treated by

epilation, is sometimes cured by repeated applications morning and evening of the following ointment.

Benzoated Lard.....0.30 grammes.
Oxide of Zinc.....0.6 "
Creasote.....20 to 30 drops.

The affected parts are then covered with courtplaster.—[*Ibid.*

DENTAL EROSION.—Dr. E. Magitot in a very exhaustive paper on some clinical studies on the erosion of teeth considered as a sign of former infantile eclampsia, arrives at the following consions:

1st. Infantile eclampsia constantly produces a disturbance, in intra follicular nutrition, which becomes manifested in a characteris lesion of dental erosion.

2nd. The *level*, *number* and *extent* of the lesion of the crown correspond to the *time*, *duration* and *intensity* of the eclamptic attacks; erosion is *one*.

3rd. Other diseases of childhood are incapable of producing erosion. Grave and long continued sickness may bring about a total disorganization of the crowns of the teeth in the course of evolution, but not erosion properly so-called.

4th. Hereditary syphilis, whose influence upon the formation of osseous and dental tissues cannot be denied, is never evidenced by the characteristic lesions of erosion.

5th. Examples of dental erosion have been found in pre-historic formations, andaccording to the reasons advanced by Broca and others, are proofs of infantile eclampsia, which constituted the object of cranial trepanation.

6th. Dental erosion in its most characteristic forms is not restricted to man, but can be found in domestic animals not subject to syphilis.—[*Gazette des Hôpitaux.*

MICROBION OF ACUTE PEMPHIGUS.—M. Gibier de Savigny thinks he has discovered the infectious agent giving birth to acute pemphigus or pemphigoidal fever. It is a mobile bacteria, formed of a series of articulations disposed in bracelets, and existing in the liquid of fresh bullæ and in the urine. The search of the microbion in the blood and injections made in animals, after

culture of the liquid according to Pasteur's method, has only given negative results so far.—[*Progrès Médical.*

URINARY FISTULA.—NEPHRECTOMY.—CURE.—M. Le Dentu, Surgeon of l'Hôpital St. Louis, in March 1875, was called to see a patient, aged 32, having a fluctuating tumor of the left side and iliac fossa, hydronephrosis or perinephritic abscess. He incised the tumor, allowing a clear liquid to escape and showing it to be a hydronephrosis. From this a urinary fistula was established. As life was endangered several times by inflammation, etc., nephrectomy was proposed. The 14th. of April the operation was performed, the kidney being found degenerated in its upper two-thirds—converted into a pocket with flaccid walls—and its lower third normal.

Two ligatures were placed about the healthy portion of the kidney, and the rest excised with scissors; the dressing was carbolized. For several days the patient was very weak; pulse 120 to 145; temp. 38° C. (100°.4 F.) to 39°.5 C. (103°.1 F.) a contrast between the pulse and temperature as is observed after hysterectomy.

At the end of two months the wound in the lumbar region had healed. The inguinal fistula suppurated for a fortnight, having been cauterized, but soon healed also, except a part in which a small drainage tube had been kept, and which furnishes but a few drops of purulent serum per day. In a short time it will be completely closed. The urinary functions are perfect. The general health is excellent and the patient who is a distinguished actor has been enabled to make a brilliant re-appearance on the stage seven months after the operation.—[*Bull. de l'Académ. de Méd.*

Article VI.

FROM THE SPANISH.

Study of the Etiology and Nature of Beriberi. By Dr. A. Pacifico Pereira. Translated from the *Gazeta Medica da Bahia*, for the Journal by Jos. Workman, M. D., of Toronto, Canada.

The history of the recent voyage of circumnavigation by the Brazilean corvetta *Vital d' Oliveira*, as described in the minute and elaborate report received by us a few days ago, from the chief surgeon, Dr. Galdino Cicero de Magahães, has furnished to us still further very useful data for the study of Beriberi, which was epidemically developed on that vessel of war during a long passage from Yokohoma to San Francisco, under conditions which were carefully studied by that illustrious colleague.

The description of this epidemic, and of its causes, the meteorological conditions coincident with its appearance, the mode of its termination, the hygienic conditions of the ship, and in short, all the circumstances detailed, corroborate the observations before made by us, and concur in showing that Beriberi is due to an anoxhæmia, produced by the prolonged action of special meteorological conditions, and other causes which produce insufficient oxygenation of the blood and diminish the scale of physiological combustion in the different tissues of the organism.

The first cases of Beriberi, on the Vital d' Oliveira, appeared at Ceylon, in May 1880. Dr. Galdino de Magahães describes the mode of appearance of the disease thus: "A few days before our arrival at Ponta de Galles, some cases of œdema about the ankles appeared, which were extending. In the preceding days, the hull of the engine had begun to exhale a nauseating smell from the waters and grease lodged there; this exhalation stained the metals and yellowed the white paint. I attributed the swelling to a miasmatic poisoning, and decided on the treatment under this impression. Peruvian quinia, arseniate of soda, ali-

mentive and analeptic tonics, partial warm baths, frictions with balsam of Fioravanti, digitalis, colchicum, salts of tartar and some purgatives, subdued a part of these affections.

Others, however, did not yield; the swelling invaded the legs; there was feebleness in locomotion, pain in the knees, epigastric tightness, vomiting in some, tottering gait, digestive atony and other symptoms which were regarded as resulting from Beriberi. Relying on our prognosis, we employed granules of arseniate of iron, sulphate of strychnia, phosphoric acid and quassia, decoction of barley with addition of digitalis and aconite, saline laxatives, frictions with the balsam of Fioravanti, camphorated or terebinthinated volatile liniment; salt baths, electric shocks by the interrupted currents of Gaiffe; and wine of quinine in the aliments. From the employment of these means the symptoms sensibly declined in force. The œdemas became limited to the ankles, muscular energy was restored, digestion became vigorous, and the other symptoms went on decreasing to their complete extinction."

Consulting the nosological and meteorological maps which accompany this very elaborate report, we see by the meteorological one corresponding to the month of May, in which the Beriberi appeared, the maximum of the thermometer marked 38.5 (Centig) (92.3° F.,) and the minimum 27.5° C. (81.5° F.,) the hygrometer showed 88° maximum, and 73° minimum; the barometer gave 761.6 mm. (29.98 inches) max., and 756. min., (29.76 inches).

In the following month the temperature was lower; the max., therm., was 30.5 (86.9 F.) the minimum 20° (68° F); the max., barometer 761.5 (29.98 in.,) and min., 754.5 (29.68); the maximum hygrometer, however, reached 100° (saturation), and the minimum 71°.

During this month, from the 1st., to the 18th., the corvette was anchored at Hong Kong; and from 21st., to 26th., at Nangazaki, whence she proceeded to Yokohama.

In describing the sanitary state of the vessel in the month of July, the report states:

"During our stay at Japan, and through a great part of the voyage, we were under the continued action of showers and overcloud. The hygrometer showed constantly great atmospheric humidity, reaching on several occasion the maximum of 100, —the point of saturation. The moisture was such that the lower

apartments were kept cooled, as if they had been steeped. The crew were exposed to these injurious influences, without protection from the rain, as their clothing had been worn out early in the voyage."

Farther on the report says: "We have also recorded the large number of individuals attacked with œdemas, without any appreciable cause. I regard these as the results of the saturation of humidity in which we lived, as I found no organic lesion which might account for them."

By the meteorological map it is seen that from the 1st., to the 20th., the temperature oscillated between 30° (86° F.,) and 18.5 (65.3); from 20th., to 31st., it descended to 11° (51.8); the hygrometer showed during the month, maximum 100°, and min. 72°; the barometer, maximum 768.5 (30.26), and min., 751. (29.57.)

It was, however, in August that the epidemic of Beriberi broke out on board, fully prepared for by the preceding circumstances, and still more by the bad condition of the ventilation of the ship, as we shall see in another part of the report relating to the hygienic state of this vessel of war. As regards the epidemic, the report states as follows:

"The first 20 days of August we passed in the voyage to San Francisco, California; when we arrived at this date, and closed the month at anchor in this port. Our sanitary state was very bad in this month. The Beriberi was developed epidemically in a frightful manner; attacking its victims profoundly, and running on to fatal termination.

"The history of the development of Beriberi on board this corvette is long. The first cases were observed in the Yellow Sea, and were combated with adequate treatment, as appears from the maps of this period. They reappeared in this passage with unheard of violence, after a series of circumstances which much enfeebled the crew."

"Continued long showers, dense overcloudings, moisture, want of protecting clothing, insufficient nourishment, want of wine or any alcoholic, abuse of wet scrubbings, little rest, etc., were the causes which were operative in the reappearance of the disease. Twenty-nine individuals were attacked more or less gravely, three of whom succumbed on the voyage."

On arriving at San Francisco the patients were sent to the marine hospital of that city. From the *Medical Record* of New

York, of Dec. 25th., we transcribed into this *Gazeta*, what Dr. Hebersmith, chief surgeon of the San Francisco hospital said of these cases of beriberi, in a report to Surgeon General Hamilton.

"It is a disease from faulty hygiene, modified in its causality by local, climatological and perhaps hereditary influences producing its primitive effects on the sanguineous corpuscles, causing the disintegration and death of the red corpuscles and augmentation of the white—the effects on the heart and the circulation are secondary,—as are the effusions; all ensue as a natural consequence of the alterations in the blood, and the proper treatment is the renovation of the blood.

"Certainly the result of the treatment of these patients shows the correctness of the ideas above exhibited. Of sixteen cases two died on the day after admission, and one on the fourth day. Nine recovered, and four remained in hospital convalescent, awaiting transport. Some of those discharged, met with cold weather on their journey to the east, and felt the result of it. As it is a disease with relapsing tendency, some of our comfrères in the east may have the opportunity of studying it."

We are certain that Dr. Hebersmith's fears have not been realized. Relapse of Beriberi is not usual unless in climatological conditions very different from those encountered by the patients disembarked there from the *Vital d' Oliveira*, and those of temperature entirely opposite in the United States during winter.

At San Francisco during the stay of the corvette in that port the temperature ranged between 20° (68°F.,) and 14.5° (58°.1 F.,) only once reaching 24° (75°.2); the max. hygrometer was 78, and the min. 72°. The rapid improvement of the patients, with the exception of the three who entered in a very advanced state, was not, as Dr. Hebersmith thought, the simple result of the treatment adopted; it was principally due to the influence of the climatological conditions met by them. This alone is sufficient to cause Beriberics, when the disease has not yet reached that advanced phase in which the lesions of the nutrition of the textures have become irreparable. It is a fact which we have observed constantly, that a voyage to a temperate climate rapidly cures Beriberics, without the aid of pharmaceutic medication, when the disease has not yet reached a very advanced period in its march.

In future chapters on this subject, we shall treat of this point more minutely.

[TO BE CONTINUED.]

Original Lecture.

Article VII.

Lectures on Fractures and Dislocations: By Jno. T. Hodgen, M. D., Professor of Special Fractures and Dislocations and Surgical Anatomy, in the St. Louis Medical College.

I.

A Chapter for Medical Students.—Fractures in General.—Varieties and Causes of Fractures.—Introductory Remarks.

With this lecture we begin the consideration of fractures Authors define a fracture as a solution of continuity. The word fracture expresses as much and quite as clearly. Bones may be broken through; or the fracture may run part way through a bone. If broken entirely through, it is complete. If part way it is incomplete. Of partial fractures there are two sub-divisions, fissure and green-stick fracture. In the green-stick fracture, the fibres of the bone not broken, are bent. In the fissure, the fibres not broken, are not appreciably bent.

There are other sub-divisions of fractures, divisions dependent on the direction of the fracture, in reference to the axis of the bone, as transverse, oblique and longitudinal. Strictly speaking, all fractures of long bones are probably oblique; for it is scarely possible that a bone be broken exactly through its axis or precisely at right angles to its axis. But these definitions must be modified. A transverse fracture is one, practically, in which the break runs so nearly transverse that when the fragments are brought together, one fragment will support the other so that there will be no shortening; yet, the general line of the

fracture may be oblique. When the fragments are replaced, and the line of fracture is so oblique and so smooth that the one slips by the other, it is practically an oblique fracture. Fractures are sometimes denticulated and serrated. A denticulated fracture is one in which tooth-like projections of one fragment, correspond to depressions in the other, like the fingers of one hand dovetailed into the fingers of the other. In the serrated fracture, the tooth-like projections are smaller and more numerous. Now we may have a fracture which is transverse or oblique in direction, and denticulated or serrated in form. If the line be oblique and the serrations or denticulations be of such a character as to prevent one fragment gliding over the other, it would practically be a transverse fracture.

When we come to the healing of bones, we shall speak of changes of the tissue which makes it possible for a fracture at one time transverse to become oblique without changing the general direction of the line of fracture. A serrated fracture traversing a bone obliquely may be so adjusted that the fragments support each other, and maintain their proper relations the projections of one fitting into the depressions in the other. But after eight, ten or twelve days, there is a softening of the bone along the line of fracture and the projections disappear so that it is not possible for one fragment to adjust itself on the other. The ends slip by each other, and that which was practically a transverse, becomes practically oblique. At the City Hospital was a fracture of the tibia in which the line of fracture was oblique; the fragments were adjusted and fitted one upon the other. When the second dressing was made it was found the softening of the tissue had altered the line of fracture, the little tooth-like projections had disappeared, so that the surfaces were smooth, and the fragments had slipped by each other. Thus we had a transverse fracture converted into an oblique one. Fractures are simple, compound, comminuted and complicated.

SIMPLE FRACTURE.

A simple fracture, strictly speaking, is one in which a bone is broken in one line and at one place without the involvement of any other tissue. But it is not possible to have such a condition of things. The periosteum is always and necessarily injured.

Practically, a simple fracture is one in which the bone is broken into but two pieces, in which there is no opening in the skin communicating with the fracture, in which the fracture does not communicate with a joint, in which no serious damage has been done the soft parts in immediate contact with the site of the fracture. In other words, it is a single line of fracture with such trifling injury to the surrounning parts as not to interfere with the usual process of healing.

It may be complete or incomplete; transverse, oblique or longitudinal; serrated or denticulated, and yet simple.

COMPOUND FRACTURES.

If there exist an external wound communicating with the line of fracture it is compound however the wound of soft parts may have been made, and however great or trifling it may be.

COMMINUTED FRACTURE.

If the bone is broken in more than one line, and the lines of fracture communicate, one with the other the bone is said to be comminuted.

MULTIPLE FRACTURE.

If there be two or more lines of fracture in the same bone not communicating one with the other, it is a multiple fracture.

COMPLICATED FRACTURE.

Fractures associated with serious injuries of joints, ligaments, tendons, muscles, nerves and blood-vessels are thereby complicated and known as complicated fractures.

IMPACTED FRACTURE.

The dense, hard shaft may be driven into the porous, open tissue of the end of a bone, making an impacted fracture. Thus the radius is expanded toward the lower end, it is open and porous, the dense shaft above may, by a fall on the hand, be driven into the open cancellated tissue of the lower end, making an impacted fracture.

Or the dense outer lamina may be driven into the porous central part of a spongy bone. You will observe then that impactions would from the very structure of bones, occur most frequently toward the ends of the long bones and not in the dense tissue of the central part of the shaft. In growing ubjects bones sometimes break at the epiphyseal lines. These epiphyseal separations are in all respects fractures, they are to be treated as such, they unite by bone, and not by cartilage, thus obliterating the epiphyseal line when the union is completed. Hence it occurs, if the beny union takes place in very young subjects, the bone does not grow as rapidly as its fellow.

Fractures of the shaft are more frequently transverse in young and old subjects, while in the middle periods of life, they are more frequently oblique.

Fractures of the patella and olecranon are generally transverse, probably because, when subjected to direct violence, the muscles aid in the separation and determine the direction of the line of separation.

The influence of muscular action in these fractures is shown in the fact that fractures of the patella and olecranon are comparatively rare in young and very old subjects, while they are of frequent occurrence in the middle periods of life, when the muscles are especially vigorous. These bones are rarely fractured in females whose muscles are much less developed than in the opposite sex.

CAUSES OF FRACTURE.

The causes of fracture are predisposing and exciting. Predisposing causes are physiological and pathological. The physiological relate to age, sex, occupation, muscular development and nervous irritability. The bones of the old are more fragile than those of the young. The infirmities of age abridge or suspend the special functions of bones, and thus impare nutrition, and alter the structure of bones, and thus render them more liable to fracture. While the bones of females are more slender and fragile, the opposite sex suffer fracture more frequently because of their greater exposure to accident, and greater muscular development, fractures from muscular action are more frequent in subjects whose nervous irritability is such a as to excite sudden and violent muscular action.

The pathological predisposing causes are such as alter the structure of bones. Wasting diseases and especially such as insure long inaction, render the bones fragile.

Mollities ossium, rickets, syphilis or ostitis predispose to fractures by pathological changes.

EXCITING CAUSES.

External violence and muscular action, are exciting causes of fracture. External violence directly applied at the site of fracture, as when a blow falls directly on the ulna while protecting one's head from a blow; or indirectly applied, as when a Colle's fracture of the radius results from a fall on the hand. All the bones of the body are liable to fracture from direct violence; while the long bones are more exposed to fracture from force applied indirectly. The bones most frequently broken by muscular action in the order of their occurrence are the patella, olecranon, humerus, femur and calcaneum.

Proceedings of Medical Societies.

Article VIII.

ST. LOUIS MEDICAL SOCIETY.

Taken by the Journal's Stenographic Reporter.

Saturday, Nov. 12th. 1881.

Dr. Blount was invited to exhibit a stethoscope, modified by himself.

Improved Stethoscope.

Dr. Blount—Mr. President: I have used different kinds of stethoscopes but I find I can hear better with this one which is simply a modification of the ordinary stethoscope. The advantages whlch I ciaim for it are that it is not so cumbersome, is more readily carried about, and is not liable to the objections that is made to the ordinary stethoscope, that it causes pain to the ear. It is of a convenient length to keep the physician from contact with the patient.

Dr. Porter—There seems to be a great antipathy amoug many physicians to the stethoscope, and possibly in individual cases this is well founded; but the objections urged are not always valid, It is at least disagreeble sometimes, to put your ear close to the patients chest, it maybe for the patients sake, possibly for your own. It is not every patient by about 99 per cent. that you would like to thus examine in hospital practice. Its not every patient in private practice who would willingly have the physician's ear close to the chest. Again, it is questionable whether witn the unaided ear you are able to eliminate sounds except the one you seek. With the stethoscope you may certainly do this. I have a case of aneurism at the arch of the aorta in which I think I would have utterly failed without the aid of the stethoscope. My preference is decidedly for the double stethoscope. the doctor objecst that the spring that brings the arms together presses often too firmly. In my instrument the spring is set by a little shoulder

screw which is so fixed that it holds its position and causes the bells to press against the ear without much force. The choice of a stethoscope requires as much judgement, almost, as the choice of a microscope. The double stethoscope, when properly used—and this can be done after a little practice—has no equal. In the country, the single stethoscope has the advantage of being moge easily carried.

Dr. HUGHES.—In 1856 or 1857, I saw for the first time Dr. Cartwright, of New Orleans, who was profoundly deaf and he carried in his pocket a flexible tube which he used as an ear trumpet. When he came to the house of his brother-in-law, Dr. Leissel, with whom I was staying, he rang the bell and a servant appeared, he took the flexible tube out of his pocket and the servant ran back into the hall and up stairs and said there was a man down stairs who had pulled a snake out of his pocket and he didn't know what kind of a man he was. Dr. Cartwight used this as a single stethoscope. It is a little singular that the single flexible stethoscope has not been more in use. I don't recollect seeing one at any of our instrument makers in this city. There is an objection to the double stethoscope that is, that they are made, partly of metal and that they do conduct sounds from without the ear, and whilst gentlemen who are so expert as Dr. Porter is, would probably be able to differentiate between the sounds of the fœtal heart and the noises coming from without, every man cannot make an examination of that character. These flexible tubes are certainly preferable for conducting sounds as Dr. Porter has said, but if he has used those which are part flexible and part inflexible, in which the metal tube comes in contact with each ear he certainly must have discovered how intently one must examine the patient, sometimes to exclude the sounds from without. It strikes me, that besides the question of delicacy in examining females, one has an especial advantage by using the stethoscope, as it enables us by getting the stethoscope higher up under the mamma, to make a better examination than we could otherwise do. And so in examination of the throat; no one can get at the throat, at least very few persons, and they must have very small heads, or else the neck be very long, so as to make a perfectly accurate examination of the tracheal and laryngeal sounds. And there a stethoscope is particularly valuble. And besides it is useful in fixing the location of special heart sounds

and definitely circumscribing sounds within cavities. I have no doubt that this is a real improvement. I have not seen any of these flexible tubes in the stores here, nor have I seen them described in the catalogues.

DR. ROWLAND.—They can be had in Louisville, Cincinnati and New York. I have had one for the last fifteen years—never been without one. My single stethoscope is something similar to this one, with a flexible tube very much like this.

It is not just like it. The tube is about the same length. The bell is not shaped exactly like this however. The bell is a little larger.

Destruction of Metacarpal Bone of Thumb.

DR. BERNAYS.—If it is in order, I would like to show a case. This patient I treated about a year ago for complete destruction of the metacarpal bone of the thumb. A part of a planing machine struck the metacarpal bone in the middle, and crushed it into quite a number of fragments, tearing away a good deal of the skin and muscles. I found it necessary, upon examination, to remove the fragments and also both ends of the bone; and then, of course, this bone being taken out, the thumb just seemed to be perfectly loose, and of no earthly use whatever, and I told the patient I thought probably it were better to amputate it, but if he were willing I would leave it and see what would become of it. I didn't think it would be of much use to him. The patient was willing, and so I left it. It didn't unite very readily, but became much inflamed; the patient had high fever for a few days, and the arm swelled up immensely, as far as almost to the elbow. There was a great deal of pus discharged. After it happened I asked Dr. Fairbrother to see the case; he also told the patient he didn't think the thumb would be of much use to him. If you will examine the case now, you will find that the phalanges of the thumb have come down upon the carpus, and that the patient has a very useful thumb.

DR. FAIRBROTHER.—I took a great deal of interest in this case. I saw it during its treatment and, at that time I had a similar one under treatment in which about half of the third bone of the thumb was removed with a result hardly as good as this. There is hardly as much retraction—the ends of the bone not coming nearly into apposition. Such a result as this will take

place sometimes. If there is no retraction, if the ends of the bones are not nearly in apposition the thumb is worse than useless, hanging limp and without power or motion. This thumb was badly injured, not only the bone, but the soft parts being largely torn away. When I saw it with the Doctor, I spoke of the propriety of removing it. He informed me that he had recommended that course from the beginning, thinking that it couldn't possibly be of any value, but still there is no harm in leaving the thumb as it may possibly be of some use, as we see in this case.

Continuation of the Discussion on Phthisis.

DR. STEVENS.—Mr. President; I was very glad that the discussion of this question was continued till to-night for the reason that I did not consider it fully discussed at the last meeting. In fact, it seems to me that the main question was hardly touched upon at all. I don't wish to enter into the discussion, but I would like to suggest one or two points that may, perhaps, elicit some remarks from others. If I understood Dr. Bernays on last Saturday evening, he told us that a particle of dust might enter into the lungs and by the accretion of other substances—morbid matters—it might become tuberculous. Is that it, Doctor?

DR. BERNAYS.—I said if a particle of dust were injected into the blood vessels, then, wherever one of those little particles is lodged it will give rise to the formation of a genuine tubercle.

DR. STEVENS.—That is about the same, I take it. And also that in a fracture of a bone, if some of the pus or diseased bone, or something of that kind, be taken up by the circulation and deposited in a gland or in the lungs, that also will become tuberculosis. The place where it is deposited becoming the nidus or furnishing the hatching point at which the tuberculosis is originated. Now this is a different idea from what I had entertained. I had been taught, and from my reading supposed that tuberculosis was definable—*sui generis*—was something that could be described. For instance, miliary tubercle was something that was inherited, perhaps, so that it was found in the lungs of the fœtus, of the child, of the grown man and of the aged man. Perhaps it was developed, sometimes never developed. I supposed that tuberculosis was something of this kind, and that it was distinct from other morbid matters. Now if I am wrong in this, I would like to be corrected. If it is true that in an indi-

vidual with perfectly healthy lungs, a particle of dust can be introduced, or by getting into the circulation somehow, it can become tubercle and give rise to other tubercles, and so result in tuberculous disease of the lungs, or anywhere else, I would like to know it. Those who are more familiar with the subject than I am may be able to tell what the opinion of the profession is on the subject.

DR. BERNAYS.—I just want to make an explanation in a few words of the statement I made in regard to the production of tubercle by injection of dust, or any sort of dirt into the circulation. In the beginning of 1870, Cohnheim made an experiment by cutting out from a cadaver some small particles of tubercular deposit in the lungs. He ground this in a mortar and made it soft by mixing it with some fluid so that he could inject it into the blood of animals—perhaps rabbits and frogs—and he found that wherever some of these little particles lodged there was formed around it a miliary tubercle in every respect answering the anatomical definition of tubercle. Now came W—r—d —m and began to inject all sorts of things. He injected little pieces of wens and found that they produced tubercle also; then he injected some dust and got the most beautiful miliary tubercles. Wherever they found these particles of dust with the microscope, there was a tubercle.

DR. PORTER, after giving by request, a synopsis of his paper, said: The so-called tubercle produced by the inoculation of dust, etc., is not true tubercle and I am borne out in this by the recent researches in pathology, Cohnheim's among them. It produces a condition which resembles tuberculosis, but is not true tubercle. Just as we have a condition which, under the microscope is like syphilis, yet a comparatively harmless condition; and you cannot tell syphilitic pus—pus from a chancre—from ordinary pus, yet we know that there is a causative difference between them. And so with the tubercle produced by the injection of anything except the true tubercular material. The point taken is this, that the absorption from a non-tubercular ulcer can not possibly inoculate and produce tuberculosis. There may be auto-infection, the result of the absorption of pus from a tubercular ulceration—a tubercular process—or there may be inoculation from an extraneous tubercular source.

DR. JOHNSTON.—Did you ever know of a case of tuberculosis that was produced by any non-tubercular substance?

DR. PORTER.—No sir! I have not.

DR. BERNAYS.—I would like to ask how, if you take the position that tuberculosis is a specific disease, how do you explain its origin? You cannot explain its origin any more than you can explain the origin of syphilis. I take the position that it can be explained, but you say that it is specific and thereby give up everything; for you stop scientific research.

DR. HUGHES.—I believe the nature of tubercle is not under discussion; nor is the question of the tubercular diathesis. I believe it has been long conceded that there is a diathetic condition of persons which makes them prone to contract one disease or another, which makes one person prone to have tuberculosis upon the reception of a certain irritation within the lungs; just as there is a rheumatic diathesis by which one who is exposed to cold will display rheumatism, while one who is not prone to that affection escapes. Two individuals take a cough, an ordinary bronchial irritation. One of them will recover in a short time from the cough, while in the other it will pass on into phthisis pulmonalis. It seems to me that that question is settled. I think that there is no division in the profession as to that fact whatever. I think it is admitted by all that there does exist a diathesis which makes one person prone to phthisis pulmonalis, while another may escape, under the same circumstances. I don't think we should take time to discuss these side issues. There are questions enough that hinge on phthisis pulmonalis to occupy us a dozen nights.

DR. MUDD.—I should like to call the attention of the society to the points at issue, again. It seems to me that we can all agree that these long continued suppurative actions, at whatever stage or wherever located, will develope, sooner or later this tuberculosis, whether the predisposition to it was marked or whether it was slight. We all agree that the suppurative action should be limited if possible; and I think that we may all agree that, if it is not the exciting cause, it is a very strong predisposing cause to the development of tuberculosis. It does, I am satisfied, produce tuberculosis in those in whom the diathesis is not perceptible, in whom there is no evidence of it, in

whom it cannot be traced, cannot be determined and in whom I don't believe it exists.

The practical point that I had in my mind in suggesting the subject was this: What is the influence of these suppurative actions upon the progress of the tubercular condition in the lungs after it had once occurred, after the tuberculosis was established? It seems to me that the same conditions that would develope the predisposition, and so establish the tuberculous condition of the lung would hasten that progress; and I think this is the practical experience of those who have made the usual observations upon those cases. Surgeons who have observed these long continued suppurations of bones about joints have found that, where tuberculosis was present, where the lungs were being infiltrated, where there was more or less softening of the lungs, they found that, after amputation of the suppurating part; the general condition of the patient improved, the lung became comparatively sound again, the portion that was breaking down healed, and the deposit was in part removed. This is the experience of Bryant, Sayre and other surgeons who have made close observations upon such cases. I believe these ulcers are often connected with the tubercular degeneration; fistulæ in ano in the great majority of cases, are of tuberculous origin when they occur in tubercular patients. I think it occurs more as a result of mal-nutrition, and if there is any drain it produces a depressing effect, it exhausts the patient, it disturbs the nerve force and disturbs nutrition. Thus in ulcers of the rectum, the practical point is whether we are enabled to cure them. I operate on them and try to stop this drain, and I believe it is a good practice to stop this drain, and I believe it is a good practice to remove these sources of irritation, remove the ulcerated point as far as it is possible and the question turns upon this point; how far as it possible to do this. As I say, surgeons have, in the last ten years, observed that if they operated for these joints, made an amputation for the cure of ulcers, or operated for fistula in ano, there was a marked improvement in the condition of the patient.

Dr. Porter's paper in which, if I understood him correctly, he said that in those patients afflicted with tuberculosis, who had an ulcer or fistula, or a local inflammation, with great disturbance of the lung, if the nutrition was comparatively good, and if the patient was not rapidly breaking down, we should simply endeavor to improve the general nutrition and look directly to

the local source of trouble. Now it is true that the ulcer will not heal when this degeneration is marked, when the breaking is rapid, but if the patient's condition be improved by the hygienic measures to which he has resorted, he is in a condition to be operated upon for the removal of the ulcer, and this should be done because the cure of the local trouble will hasten the improvement of parts which we cannot reach. I cannot understand how it is, or that it can be possible that ulceration or suppuration will prevent or retard the degeneration of the lungs when once tuberculosis has been established. It seems to me that the drain sometimes does produce this depressing tubercular degeneration and hastens the progress of the case. This came to my mind practically, a few weeks since. A man in the hospital had a tubercular degeneration of the lung, with some softening, I think. He had also an ulceration about the ankle joint. I amputated the leg and the stump healed, and since that the cough has been rather less. The man had been an opium eater and a whiskey drinker both; I have cut off both the opium and whiskey and have had this to contend against, and yet the general condition of this man is better now than it was a month ago when the amputation was made, and it occurred to me that probably the reason why these patients usually improve after amputation may be, firstly, because it compels them to lead a less active life, and, secondly, perhaps, because they have less tissue to nourish, less tissue to check the growth nd repair; and the question occurred to me, whether it wasn't a therapeutic measure to amputate a man's legs and arms to cure this tubercular tendency of the lung. Whether it would have this effect.

DR. SCOTT.—Looking, as I do, upon tuberculosis as a disease *sui generis*, that it is an hereditary disease, I don't believe that any amount of suppuration in a man will produce tuberculosis without an hereditary taint, or that we can point to cases in which tuberculosis has been developed in the lungs. How many of us have treated cases of suppuration which have gone on for months and even for years in which our patients have made rapid recoveries and recovered without any tubercular manifestation in the lungs at all. How many cases of fistula in ano have we all operated upon which healed without the least tuberculosis manifesting itself afterwards. If there be hereditary taint in this man which

he inherited from his father, it may develope itself at the time of this suppuration or ulceration, or it may be developed previous to that time. We know that sometimes these hereditary diseases, tuberculosis more especially, have a tendency to skip an entire generation. I have in mind an instance of this—a family of which the father was a remarkably healthy man, who lived to be over seventy-five years of age, and the mother was the same way—very healthy, yet they lost nine children by tuberculosis of the lungs. When I came to trace up the history of the family I found that the father's father died of consumption, and the mother's mother had died of consumption. The brother's children have never had it. That generation seems never to have developed it. But no amount of suppuration will ever produce a tuberculosis because tuberculosis is a specific disease, it depends upon a specific cause, and this cannot be produced. No amount of lowering of vitality will do it. Scarcity of food will not produce it, no matter how long the individual is kept on low living and under unfavorable hygienic circumstances. In the lower order of animals of which Dr. Bernays speaks of those particles of matter having been injected into the blood, those animals were selected in whom there is an hereditary taint of tubercle. We all know that in rabbits the tendency to tuberculosis is so greatly developed that under the most favorable circumstances they are liable to develope it and hence, when the disease is developed by this irritation it is the development of a disease to which they are hereditarily prone. This injection of foreign substances doesn't produce tuberculosis proper. I cannot agree with the proposition of Dr. Mudd. Neither can I agree with my friend, Dr. Porter, who divides tuberculosis into hereditary and acquired. I don't know what you mean by acquired tuberculosis. I don't believe we can acquire a tendency, an hereditary tendency to disease, nor do I believe we can acquire a tuberculosis. I believe it depends upon a specific cause.

DR. PORTER.—Why not? Is not syphilis either inherited or acquired? A tubercular tendency may certainly be inherited, that it may be acquired, I also hold.

DR. HUGHES—Undoubtedly in the vast majoirty of cases phthisis pulmonalis is the product of more than one generation which is not thecase with every diathetic condition with which the profession is familiar. But that it must and may have a begin-

ning without a pre-ëxisting diathetic condition, it seems to me, must be onceded from all clinical odservation. These diatheses have had a beginning and their possibilities are existent in the organism, and it is extremely illogical to admit the possibility of a diathetic condition being transmitted and at the same time to deny the same organism, which is capable of transmitting it, the possibility of receiving it anew. What is there in that organism that makes it inpossible for you or I to contract phthisis pulmonalis, even though we have no ancestral, hereditary transmission that gives that peculiar tendency ? What is there in the clinical history of the race that leads us to conclude that those in whom the tubercular diathesis first developed must have had entailed upon them this morbid heritage which is insisted upon? It is not only true that phthisis may be engrafted anew upon an organism not hereditarily prone to its manifestation by reason of the coöperation of the causes which develope the diathesis in others; but according to the teachings of the best pathologists of the day, those who give special attention to the subject, it is now said that this diathetic condition may be transmitted by inoculation. I believe the inoculability of tubercle is now the reigning doctrine of the day; and if it be an inoculable disease, then how much more illogical is it to deny the possibility of its being engrafted anew upon an individual without the pre-ëxistence of the diathetic tendency. Now in regard to the influence of fistulæ, ulcers and other sources of irritation on the arrest of phthisis, it cannot be denied that an ulcer or a fistula or any other drains upon the system in certain stages of their existence are a source of irritation to the organism; and it cannot be denied from observation. I apprehend, that a fistula or an ulcer of any considerable extent appearing in a person previously affected with phthisis becomes an additional source of irritation; and if practicable, these additional sources of irritation upon an organism already irritated by disease, already being exhausted by persistent morbid processes, these ulcers or these fistulæ ought to be arrested. But there is another fact which should be taken into consideration. There is a class of cases in which the healing of certain chronic ulcerations have developed afterwards, phthisis pulmonalis and this condition is known to be aggravated when the ulcerations are healed. I have seen cases where the pulmonary trouble seemed aggravated while the ulceration was healing and to be better when the sore was open, ulcerations which had persisted, which were chronic with the individual. It was only in

this class of cases that I tried to offer the explanation which I did the other night; and that is, that an ulcer to which an individual has become accustomed and which has made no perceptible inroads upon his general health is a peripheral source of irritation which is salutary in its effect upon the organism in these exceptional instances, by acting as a peripheral source of central stimulation. We make this peripheral irritation by setons, sinapisms, and by reason of a peripheral impression, make a central impression which is salutary in its effect upon the organism. I cannot now recall the name of that celebrated anatomist who went to the amphitheatre and made his best lectures under the influence of a peripheral stimulatiou applied by a means of a blister on his chest. If you take the irritation produced by the presence of tobacco upon the organism, a depression which in the first experience of every one, produces nausea and extreme prostration, and yet after the condition of tolerance becomes established the system becomes accustomed to the presence of the irritant it grows up to a requirement and men who begin the practice of tobacco-using in early manhood acquire what we call habit. They became so accustomed to the presence of this abnormal and morbid irritation, that it becomes, actually, a source of consolation and a source of benefit. So I think that in some cases, it is unadvisable to arrest certain sores. I would not have the gentlemen infer from that I consider it a proper course to pursue in everycase of fistula, or in every case of ulceration but it seems to me it is a satisfactory explanation of those cases that seem to get worse when the peripheral irritation is stopped.

SATURDAY, Nov. 19, 1881.

Tarnier's Forceps.

DR. MAUGHS.—Mr. President, as I was coming to the Society to-night, I thought I would bring down a pair of Tarnier's forceps which are making some noise in the world. Possibly they have not been exhibited to the Society before. Some of the members may be interested with them, especially as there is a principle involved in their construction. They are not very complicated, and no especial skill is required in their use. There was a great deal of ingenuity in the construction of these forceps The forceps, as you see, consist of two tractile branches, like an ordinary pair of forceps. You would scarcely know that they were not an ordinary pair of forceps but these branches are simply prehensile branches; they are not tractors. The other night at the Obstetrical Society, a doctor insisted they were intended to pull by, because they were nicely finished; but they are simply prehensors. Below them you see the tractors which are fastened by a freely movable joint near the lower portion of the fenestra, and continue in the line of the angle of the blade. Another arrangement is that the handles are bent back until they are in the line of the prolonged axis of the fenestra. They are introduced the same as the ordinary forceps, compression is made and they are fastened with the screw. They are thus permanently fastened upon the head of the child. The object of Prof. Tarnier, and one which he has accomplished, was to enable us to make traction in the axis of the plane of the pelvis. This we are enabled to do in virtue of this arrangement. The next claim of Tarnier is that they permit rotation of the head of the child, that they are freely movable, this, also is correct. Then, again, he claims that they will not slip; and you will find that this is true. After the branches have been fastened by the screw it is held as in a vice until the head is delivered. After the forceps are applied, these additional handles are applied and traction is made exclusively by these, which as you see are a continuation of the traction rods. These handles are the indicators. You see as traction is made in the axis of the plane of the pelvis, these handles will rise up and thus constantly indicate the direction of the head. It indicates very readily the point in the pelvic canal at

which the head is. The greatest objection to this forceps is, that the pressure on the head is permanent from the time that the screw is fastened until the head is delivered externally. With the ordinarry long forceps we apply pressure as we make traction; that is, we imitate nature, force is exerted only during the existence of pain; when the pain ceases traction ceases. With the long forceps we loosen the handles and the circulation is allowed to go on in the cranium during the intervals. Then when we are using very great pressure with the long forceps, it is intermittent. We cannot pull without making pressure. If we make one hundred pounds pressure, that is, traction, we make perhaps, fifty pounds compression. The objection to this forceps, then, is that the compression is not taken off from the time the forceps is applied until the child is delivered; and this is not a special objection, because we need not make too great compression. The objection would only hold good where we make too great compression and continue it a great while. The traction is always made in the axis of the obstetric canal through which the head is being forced. Taken altogether, I consider it a valuable addition to the obstetric bag. We might sometimes be enabled to deliver a child with them, where we would otherwise be forced to resort to the crochet, it being impossible to deliver with the other forceps.

DR. BARRET.—One objection to them, Mr. President, is that they are exceedingly bulky, at the opening where the fenestra begins, and for that reason there would be more danger of tearing the perineum. They take a good deal of space; I don't think the fact that they clasp the head with the screw arrangement is an objection. The screw is an additional means of compression in cases where it is necessary to exert pressure; and where unusual pressure is not required, of course, it would be unnecessary to tighten the screw to a dangerous extent. The breadth between the fenestra is three inches and I should think that the thickness of the blades altogether is about a quarter of an inch, so that I should think it scarcely possible to deliver through a diameter of three and a quarter inches; that is about as small a diameter as can be delivered through with this forceps under any circumstances. But there are those who contend that they have delivered through a less diameter than that, and if the head were unusually small or unusually plastic, I presume that in certain

cases it would be possible to do it; but with this forceps it would not be possible to do it, as the forceps itself takes up a quarter of an inch of this diameter.

Treatment of Tuberculosis.

DR. RUMBOLD.—Two weeks ago to-night I made a statement in regard to the relation of an ulcer to a tubercular condition of the lungs that I wish to express in a little clearer manner as follows:

If an ulcer or fistula in ano, which preceded the tubercular condition of the lungs, is cured, the tubercular condition is improved; if, on the other hand, an ulcer or drain which succeeded or followed the tubercular disease, is healed, then the latter disease is made worse. I did not wish to give any theories on this subject. I merely wish to say, that this has been the result of my observation for the last ten or twelve years.

DR. JOHNSTON.—When I entered the profession, the books that I read taught me the doctrine which Dr. Bernays promulgated here the other evening, and it was the view held by the most learned medical men in Europe and America, viz: that particles of material were inhaled into the lungs and produced tuberculosis. I was also taught that congestion resulting from this cause, was capable of producing tuberculosis of the lungs. By referring to the works of Clark, Lewis and others, you will see it stated that particles inhaled, or any other thing producing local irritation of the lungs would, in ninety-nine cases out of a hundred, produce tuberculosis. Now, of course, this doctrine influenced the treatment, and we were told to bleed the patient, and especially, if there were hæmoptysis; if that didn't relieve it, we were taught to give small doses of tartar emetic and use plasters. Then you were taught to give anodynes, and that was the treatment that was relied upon, except a recommendation of change of climate. It was said then as now, that a change of latitude and a pleasant life would cure consumption. About 1850 the doctrine that an ingestion of larger quantities of hydro-carbons was beneficial. Then we had the doctrine advocated that the disease was due to a deficiency of blood and a derangement of the digestive organs. For the last fifteen or twenty years we have held to the use of cod-liver oil, and a change of climate. We have been reduced to these two remedies. Now when this doctrine of local irritation came up, inhalations,

which were made popular by Robert Hunter, were employed. The patient was made to inhale the fumes of burning tar; the idea being to reach the disease directly through the lungs. For the last fifteen years, I believe, inhalations have been used more or less as one mode of treatment. I believe that it is one of the best modes of treatment.

It does seem to me that cod-liver oil does nourish the tissues, and changes the corpuscles of the blood; it does tend to bring about a healthy condition of the lung, and for this reason it is a good remedy; but the trouble with this remedy is that in dyspeptics, the cause of consumption being in the digestive organs, there is not one case in twenty that will tolerate it. The hydro-carbons containing alcohol cautiously used, I think a good remedy. Outside of the diet system and the cod-liver oil, if it is tolerated, I know of no remedies which promise to cure consumption; our only additional remedies are such as relieve distressed human nature. Believing, as I do, that consumption results from deranged nutrition—whether it be hereditary or acquired—I think that if we bring the blood corpuscles up to the healthy and normal condition we may cure consumption.

DR. PORTER.—There is no disease, no condition on the face of the earth that to-day, with our luxury and hygiene, and fast living, is more important than the study of tuberculosis or, if you please phthisis. There is no disease that so threatens the human family, mentally and physically, as tuberculosis. It is a fact, sir, that in the New England States, from the record, Massachusetts, Rhode Island, Connecticut and in the Northern part of New York, there is, of every 10,000 deaths, 2,000 from phthisis, and in the Lake region from 1,400 to 2,000 out of 10,000 deaths are from phthisis. The general prevalence and the progress made in the study of the disease, render the question of its therapeutics of the greatest importance. There is no better field for study.

The treatment of phthisis ought to begin early. Many members of the profession are not careful enough in their early examinations of the patient. I mean just what I say. A patient will go a long distance to a city and receive an opinion founded upon an examination of the chest without having his chest unclothed, and sometimes with the coat on. The patient might just as well be at home. To bear out what I say, I will mention that there

is an insurance company with a considerable monetary interest in St. Louis, and in that company during September and August, the last twelve deaths of which I have any record, five were of phthisis and all those cases were examined and admitted within three years: that is, nearly fifty per cent. of deaths resulted from phthisis, and most likely in some of those cases the earlier progress of the disease had existed when they were exanined. I am inclined to this opinion for the reason that I heard a prominent insurance man say to an examiner that it was not necessary to remove the vest in making an examination. How could a case of incipient phthisis, aneurism or mitral disease be detected through a vest and two shirts? I hold tha. it is of the first importance then in the treatment of phthisis, that we ake a careful physical examination.

Secondly, when phthisis is well determined, protection of the body is necessary. In this climate it is difficult to do this; but in a case of phthisis protection means everything. It is absolutely necessary that the patient should wear sufficient clothing. There is an antipathy among many patients, and especially those who have been raised in luxury, to wearing woolen under-clothing and thick soled shoes. The feet especially should be kept warm. A lady called at my office for me to examine her lungs, and she had on a flannel chest protector, chamois jacket, her flannels, her ordinary clothing, and a seal skin sacque. And she had been driven in her carriage from a warm store to my office. With this she had on thin, almost paper soled shoes and thread stockings. The wonder was that she escaped trouble.

Phthisis grows, flourishes most rapidly where the vitality is greatly diminished. It has been estimated that a night sweat—an ordinary night sweat is more debilitating to the patient—he looses more vitality during the process than a healthy man would during a hard day's work. It is also estimated that in a night sweat every ounce of perspiration is equal to so many pounds being carried so many miles. If there is a discharge from an ulcer and the discharge becomes greater, diminishing the vitality, it should be seen to. All abnormal leaks should be stopped.

The patient must be well nourished; if there is constipation and a thick coated tongue, it should be seen to at once. The matter of nutrition is deservedly receiving much attention.

Where there is an active progress of the disease, rest should

be enjoined. I have put patients in bed who were able to walk two miles; simply because there was a temperature of one hundred and one and a quick pulse; often from this alone the temperature goes down and the pulse is reduced. The question was asked before the society convened: What is the best climate for tubercular patients? There is one answer to that question: Every case from the beginning is an individual case, and the treatment ought to be individual treatment, and the climate suited to the patient. You will certainly not send a patient who has an incipient phthisis, where there is simply a suspicion of phthisis, to the same climate that you would send a patient who has active disease of the lung far advanced. Where there is an active secretion of pus, high temperature and quick pulse, a proper climate may be of immense advantage to him. Where patients are in the early stages, where there is little active progress, as a rule, such patients will stand a higher elevation than those in whom the disease is more advanced. In the early stages, patients require a climate in which the atmospheric pressure is lighter, and the tendency is to increase the circulation in the lung; whereas, in more active cases, in cases where there is profuse secretion et ., these high altitudes are disastrous; especially if there is a tendency to hemorrhage, the patient should seek a less elevated, dry, and even climate. In the first stages, such places as Leadville, Colorado Springs, and the Adirondacks. In the later stages, San Antonio and other southern resorts promise good results. Or, still better, lower California, or if your patient has no objection to a trans-Atlantic voyage, Algiers. I have two cases in Algiers which have done remarkably well, having recovered from what seemed to be a dying condition. Mr. President, in the treatment of phthisis by medication, it seems to me that Dr. Johnston is scarcely correct when he says that we are reduced to cod-liver oil and climate. We have much at our disposal besides. I scarcely like to go into the mention of the different therapeutic agents. Inhalation may do good in special cases; but I do not believe in inhalation as a special treatment of phthisis, nor in any special treatment of it.

DR. WESSELER.—I have had some experience in treating this disease. I certainly agree with Dr. Johnston when he says that the disease is caused by a derangment of nutrition. I do believe that phthisis is not always hereditary; it is in the most cases

acquired. In a good many cases it is produced by a depression of the nervous system; and when that derangement is such as to derange the stomach and produce dyspepsia, it deranges the nutrition and we get a calcification. Or it may occur from some other cause, lack of circulation, etc., until the lung becomes absorbed or calcified. Some lungs waste from one end and some from the other. I don't believe that the lungs always begin to waste from the top; I don't believe in filling the stomach with medicines, if no food is taken. Of course it is proper to give some little medicine, but you cannot treat this disease with medicines alone and treat it successfully. Tonics, the mineral acids, quinia and the tincture of iron occasionally, with a little morphine or opium is about the only treatment that will be of any benefit. If they are able let them walk about a little. And a little alcoholic stimulation may also be of benefit. If they are able to walk about they may take a glass of beer occasionally, or a little whiskey; too much whiskey does more harm than good. I think that all dyspeptics thrive better with a little alcoholic stimulation, but they must not take too much. A little morphine or opium, or a little sulphuric ether at bed-time makes them sleep well, and allows them to gain strength. But to give cod-liver oil deranges the stomach and only increases the dyspepsia. I think it does more harm than good. Change of climate is all right if it is done in time; but when the physician sends the patient away to die on sombody's hands, it is wrong. I believe that if the patient is at home we should make him as comfortable as possible, and not send him off to the mountains to die, as they so often do, to be sent back in a coffin. I think it is wrong to send them away from their homes, their families and their business, to cause them great expense, and the family great expense to have the body sent back. The change of climate ought to be made early, and it should be permanent and not merely for a few weeks or months. When cavities have formed the best treatment is whiskey and morphine. I think that is about as good as we can do. Cavities have been cured, I have cured some cases myself. I have cured small cavities, but when the cavities are large, the best thing you can do for the patient is to give whiskey and morphine—let him stay drunk. If the patient is satisfied, that is the best you can do for him. That cartainly is the humane way to treat them. Make them as comfortable as possible and let them end their days in peace, and

don't send them to the mountains when you know they will die before they get there, or soon after. If they eat and take exercise, they don't require much medicine. A little bismuth, sulphuric acid and occasionally some Dover's powders are all that are required. This is my experience.

DR. MULHALL.—I think the points made by Dr. Porter, very valuable ones. In my opinion the treatment of consumption in its incurable stages is included in four words: "Encourage hygiene, avoid drugging." I mean by hygiene, reference to the food they eat, the air they breathe, the clothes they wear, the exercise they take, the company they keep and with regard to these strict, accurate and detailed instructions. If cod-liver oil, maltine or whiskey be regarded as proper additions to their ordinary diet, then advise accordingly; and so on with regard to the climate to be sought, the kind of clothes to be worn, the kind of exercise to be taken, whether Ling's gymnastics as indicated for frail chests may be advisable or not, etc. Let them avoid drugs, since they tend to enfeeble that organ on which we must so much rely for help in curing consumption, the stomach. The doctor insists upon a careful examination, with the overcoat, vest and other garments removed. When a patient comes to a physician to be examined—if he has not got phthisis—he will ask; do you think I will get it? Perhaps the family history and the personal history of the patient are more valuable even with the overcoat on, than the examination of the chest with the overcoat off, when each is weighed against the other in the incipient stage of consumption. I have examined last month I think about sixty normal chests and I don't think the normal signs—the respiratory murmur and so forth—were alike in two cases. In incipient phthisis, naturally, the signs will be very hard to discover, they will be very faintly heard. When they are unmistakable, the case is already well advanced.

With regard to protection, it is questionable whether the hardening process is not better than the hot-house process. Of course, the medium way is the golden one; but with each case you will have to lay down definite and detailed rules. With regard to climate, of course it is our chief resource; but I think that this mistake is made; we let the patient come back to see his friends. We should say to the patient; are your domestic or business relations more important to you than life? Should he

say no, then you must arrange your affairs so that you can remain where your health improves for the rest of your life, and do not come back unless for a visit of a week or two; never stay months at a time. I think this is a point that is very much offended against. A patient goes away and stays for a year, then comes back and stays a year; goes away for a year again; and this is done over and over; each visit to the place where he contracted the disease giving it a fresh impulse. The patient should be instructed to make the region that benefits him his permanent home. I generally advise them to go and engage in farming if they can possibly do it, say somewhere between Austin and San Antonio. I don't think there is any such thing as medicinal treatment of consumption. Perhaps we use the term tuberculosis when sometimes we ought not to use it. I think if we get a patient who begins to cough and expectorate, who has lost very little weight, and who has no family history of consumption; and we find over the apex of the lungs some symptoms of consolidation, we should use a mild antiphlogistic treatment with counter irritation. I know of no reason in the world why the lungs should not take on a simple, ordinary inflammatory process as well as any other organ of the body. Analogy favors such a belief. I had a case last year of a man, whom I think Dr. Porter saw with me, who had advanced laryngeal phthisis with consolidation of the right apex. His weight was 138 pounds. I introduced a seton at the back of his neck. He said it was the most satisfactory treatment he had received. His cough ceased, his expectoration ceased, his night sweats ceased and he weighs 160 pounds; but he does not live in St. Louis, he lives in the country. I think in this case the lung trouble was consequent upon the larygeal.

DR. MAUGHS.—My friend, Dr. Johnston, has asked me to give in my experience in regard to the treatment of consumption and the changes in it. I heartily endorse the doctor's remarks in regard to the mode of treatment formerly pursued. Even since I have been practicing medicine, which is not so long as Dr. Johnston, it was still the system in vogue to a considerable extent. The patient was placed in a warm room and carefully guarded against the possibility of cold, emulsions were used, and many gave tartar emetic in the beginning; the diet was carefully selected and the antiphlogistic treatment followed. What a change

since 1850! I think the patient was scarcely ever bled if the symptoms were pronounced, plasters, setons and issues were made use of with a lowering of the diet. In the premonitory stage, at the initiation of consumption, it was common to treat it by blood-letting. With regard to the diagnosis of consumption, I think it is of the utmost importance that we make a thorough examination in all cases of supposed chest disease. With the means of diagnosis which we now possess it is possible to make a pretty correct diagnosis even in the early stages of phthisis. During the last few years our means of diagnosis have improved very much; our therapeutics has not kept pace with the advances in pathology and diagnosis. A physician should not examine a patient supposed to have chest disease with his overcoat, or any other coat on. It is utterly inexcusable; such a man would be a disgrace to his profession. Such an examination does not benefit the patient, therefore he has done the patient, as well as the profession, a gross injustice. It is impossible to guess what is the matter with a patient. You may suppose he has chest disease; his father and mother may both have died from consumption. He may die from it, or he may not. He may never have consumption at all. I have seen such cases where men have lived to an old age whose parents both died from pulmonary troubles. The vast majority of consumptives are born of parents that did not have consumption. The vast majority of those who die of consumption have acquired it; it is not necessarily hereditary. A continued bronchitis, or protracted cold excites a condition which predisposes to phthisis pulmonalis. This continued bronchitis produces consumption. I believe I was one of the first in this country to adopt the stimulating treatment of phthisis pulmonalis, and I recollect distinctly the case which led me to adopt this treatment. There was a family in our part of the country, an excellent family, all the members of which had died of consumption except a dissipated son. One of the boys was very dissipated and he was the only member of the family who survived. The neighbors said it was too bad that this drunken boy should be the only one to survive, and I concluded that the reason he didn't die was because he was a drunkard. His sisters and brothers had all died. Since then I have treated this disease with liquors. The patient should wear warm, comfortable clothing during winter, and take cod-liver oil, maltine and whiskey; I have seen much good result from this treatment. But I

think a doctor would be inexcusable if he did not make a careful examination. We need not scare our patient with the prognosis. Tell your patient he is not going to die at all, for they may not die from the disease. I remember a case, a very striking case of a very lovely woman, and very highly educated; but unfortunately her father was dissipated. I was sent for to see her late in the fall, the weather being somewhat frosty. She had a large cavity in the apex of the left lung, hectic fever and so on. I said what a pity it is that this woman can't go south, to Florida for instance, but it was out of the question. I visited her from time to time, giving morphine, cod-liver oil, lacto-phosphate of lime and soda and whiskey. She could drink only very little whiskey at a time at first, beginning with a teaspoonful. I told her to take what she could, of course not expecting it would be of much benefit, but she improved, and has continued to improve. She married three years ago and had a child, which I believe was born dead. I didn't see her then, but I saw her the other day and she was looking comparatively well; she has consumption yet, but she has improved very much. The cavities have healed up. She still has a little irritating cough and doubtless there are tubercles there yet. By all means make a careful examination of your patient; find out the exact condition. Say to your patient "My dear madam your lungs are diseased; there is a cavity here, there is a larger one there; but it doesn't follow that they are going to kill you. Don't get alarmed. Suppose you have a cavity in the lung; suppose you have consumption it need not necessarily kill you. Patients have lived 20 years with a cavity in the lung, and have then died from something else." Encourage her, build her up, place her in the most favorable hygienic condition, and give her a nutrritious diet and stimulants, and your patient may not die of the consumption at all. Give your patient maltine and cod-liver oil if the stomach will bear it. I see no reason why we should not give maltine if the stomach will tolerate it. I remember a case which I treated many years ago. A prominent gentleman in the Confederate Army was afflicted with consumption. When I examined him I found that there were extensive cavities in his lungs; every morning on waking he was attacked with violent coughing and expectoration. He also had night sweats and hectic fever. When I saw him I told him his condition was serious, but that I had seen worse cases. I advised him to drink whiskey. He told

me that he had never drank any whiskey, and I believe it was true. At any rate I placed him upon cod-liver oil and whiskey. At first he could take only small quantities of whiskey; but in the course of 3 or 4 weeks he drank three pints of "pine top" whiskey in a day. He improved in health and as he got better he reduced the quantity of whiskey and drank only a quart a day. He afterwards stopped drinking whiskey altogether, and when I last saw him, was doing well.

SATURDAY, Nov. 26th, 1881.

Pulmonary Calculi.

DR. WESSELER.—Mr. President; I have a pathological specimen here; it is one of those degenerated tubercles, or pulmonary calculi. We very seldom see one of these calculi in a patient while he is alive. They are found quite frequently, I believe, in post-mortem examinations. But this man commenced to spit them out seven months before he died. By promising him an extra ration of wine, I got him to save some pieces from the sputa. It shows to what extent the degeneration may go on in the lungs, and the patient still live.

DR. RUMBOLD.—I think it was in 1872 that a gentleman called to see me at my office, for the purpose of showing me a small calcareous mass, which he had expectorated from his lungs. I have the specimen at my office now. He was then, apparently in good health. His usual weight was 175 or 180 pounds. He had lost weight but did not have much cough. He took a little cold and in recovering from this, he expectorated a hard mass, when he spat it out, it made a slight noise on the carpet. He put his foot upon it and found that it was hard, picked it up and brought it to me. I examined his lungs by auscultation and percussion, but found no evidence of disease. This man was still living in 1879, in Nashville.

DR. DICKINSON.—Was it calcareous?

DR. RUMBOLD.—I have not examined it except as I said. It looks like Dr. Wesseler's specimen.

DR. HILL.—Did he have hemorrhage?

DR. RUMBOLD.—Just enough to redden the expectoration.

DR. DICKINSON.—Where the masses are nodular in character,

I think there is ground for suspicion, that in some unguarded moment, he may have inspired the article. It may have been a fragment of ossific substance. But this reminds me of a case I had some twenty years ago, of a boy, who was probably five or six years of age. He had been running about the room playing with other children, having in his mouth a buckshot which he had chewed so that it was considerably flattened. In some way, during a fit of laughter I presume, he inspired suddenly and the shot passed down into the lungs. The boy was troubled with an excessive and exhausting cough; and I think he also expectorated some blood at the time. I gave the child some treatment and the mother went home and administered it. Whether she came again before the final result or not I am not sure; but at any rate she told me that one morning she was awakened by the child who was leaning over the side of the bed and in the act of coughing. During this paroxysm he coughed something up which fell out of the mouth and striking the floor, it made a noise; on examining it she found that it was the buckshot considerably flattened. The child was relieved of all its bad symptoms and made a speedy recovery in consequence of which I received a great deal of credit that I didn't deserve.

DR. JOHNSTON.—I think these formations are found in every gland in the body. According to my observation they may occur in any of them. Every particle of bread we eat has lime in it. It is possible to have these formed in any gland.

DR. RUMBOLD.—It is pretty well known that in all these patients in which there is an expectoration of cretaceous matter, there has been a long manifestation of disease, a long continued cough, etc. It is very uncommon to have a gentleman enjoying good health in every respect, in the vigor of life—I judge he was about forty-five years old—expectorate one of these chalky lumps of matter. That is the reason I report the case. It is a very uncommon thing. I have frequently met with patients who expectorated them, but they were persons who had lung disease or tubercular deposits; but that one who is healthy should cough one of these masses up without any premonitary symptom, is unusual.

Nasal Calculi.

DR. ROWLAND.—The subject which has been presented to-night reminds me of a case which occurred in my practice a good many years ago. In the year 1859, I was attending a

child, the mother of which was a quite healthy lady of, perhaps twenty-eight years. While I was treating the child, the mother told me that there was something in her nose about which she had consulted a former family physician, and that he couldn't give her any satisfaction about it. Upon inquiry I found that she had been conscious that there was something there for two or three years. I immediately made an examination with such appliances as I had at hand. I dilated the nostril, and upon introducing the probe I found something that grated like bone, or stone. The next day I carried with me suitable instruments, at least such as I had, and after bathing the face with warm water I dilated the nostril with my fingers and tried to remove the foreign body. It was perfectly loose and I thought I could remove it easily, but I found that I couldn't remove it without considerable laceration, although her nostril was quite large. I broke it into two pieces, not wishing to crush it much. I wanted to get it out whole if possible, but I was compelled to break it. Altogether it measured about an inch and a quarter in length, and of irregular thickness. In removing it I produced some little laceration. I should have stated that there had been a considerable discharge of offensive matter. This ceased after the removal of the mass. It is the only case that I have ever seen. It was a calcareous deposit.

DR. DICKINSON.—Did I understand you to say that it was entirely detached?

DR. ROWLAND.—Yes, sir; entirely detached. It occupied the space of the turbinated bone, part of which was absorbed.

DR. JOHNSTON.—I must say that Dr. Rowland's case is unique. so far as my information goes, these formations are always involved in a membrane and are secreted from the blood. These formations grow by accretion, but they must be in a closed mucuos surface. When they occur on a free mucous surface, and especially in the nose, the logical conclusion is that at some time or other a foreign body was brought in, and that it grew by the adherence of particles from the atmosphere.

DR. RUMBOLD.—I think Dr. Johnston's explanation is more unique than Dr. Rowland's case. I have a patient who is now living at Georgetown, Col., from whose nostrils I have taken calcareous masses. I suppose what I removed must weigh nearly

two ounces altogether. These masses are formed in the open cavity. I have seen them in the ear where there is peforation of the drum.

DR. WILLIAMS.—As the subject of stone is up, I will refer to a case which I saw some years ago in Cincinnati. A middle-aged lady in good health called at the office, with a hard round lump in the conjunctiva, which felt as if it was a bean. I examined it and found it to be a stone—the character of that they call dacryolith. It was supposed to have formed in the lachrymal gland and, to have passed through one of the efferent ducts until it lodged in the conjunctiva, and there enlarged until it got to be the size of a bean or pea. It was extremely hard and smooth. It looked as if it had undergone a marbleizing process, being hard, smooth and somewhat clear like marble. The patient was in good health otherwise.

DR. BERNAYS.—I believe I can help to explain the origin and growth of calculi on mucous surfaces, especially such as are exposed to the air. The first condition that is necessary for the growth of a stone is an abnormal condition of the mucous membrane, which is generally called catarrh or chronic inflammation, with over-secretion. Besides, we know that in the mucous membrane of the nose there are numerous mucous glands which secrete a thick mucous. Now whenever a catarrh is located in these membranes, the first thing that ensues is an over-secretion of mucus, and if this becomes chronic there may be ulceration which is accompanied, first by acid and afterwards by alkaline fermentations and then we have the conditions necessary for the deposit of calcareous matter and the formation of stone.

DR. JOHNSTON.—Am I to understand that it forms on the free mucous surface?

DR. BERNAYS.—No sir! It always seeks those parts of the cavity which are so located that it forms a little pond, in which the mucus will remain long enough to become decomposed, and in the bottom of this little cavity the calculus is formed. I don't think they can be formed unless the cavity will hold the fluid long enough to allow it to decompose.

DR. JOHNSTON.—Let us come down to the scientific question. By what process in the mucous organism do we find decomposition in the various parts give rise to these hard substances we

call calculi? The case of my friend Dr. Rowland, presented the aspect of a calculus that had formed in the nose externally to the mucous membrane. When that was up, I stated that I thought that was an impossibility. You find them on the free surface of the mucous membrane of the bladder, but they are first required to be enclosed in a sac so as to retain the lime which is excreted from the blood. About 30 years ago I was called to treat a lady for an affection of the tonsil. We found it necessary to extirpate it, and it was with the greatest difficulty that I cut through the lime formation; but it was inclosed in a sac. So it is in all these cases. These calculi may be formed in the apices of the lungs; in the lymphatic glands; in the parotid glands. If they occur in the ear they must commence in the internal ear where it could not pass out. So it may be formed in the Eustachian tube in some small sac in the mucous membrane there. I do not think they can be formed upon the free mucous membrane.

DR. RUMBOLD.—Dr. Johnston's theory, of its taking its origin from the glands, in the glandular structure inside the central mass, so that they would have to be in this shape, (illustrating), we know is not the case. There is no doubt in my mind but what it commences to take on the calcareous form in these small glands, but as soon as the gland is full, the secretion passes out along the side of it, and if these cretaceous accretions take place at all, it is from the top and not from the under side. That is proved by the fact that in the masses that I got from my patient, now living in Colorado, there are some threads in them, some hairs that were inhaled. I have examined them very carefully under the microscope. It was not nearly so regular as the limestone formation, but it was always hard to remove. It adhered to to the surface very tightly, I had to remove a little to-day and a little to-morrow and so on. The removal was always painful.

DR. WILLIAMS.—I am reminded of still another case by the remarks of the gentlemen, which occurred some years ago in Cincinnati. A soldier came into our office about the close of the war; he was so loathsome in appearance that the men and women that were in the office began to run as though it were a case of small-pox. Upon examination we found that the man's mouth was completely filled with this cretaceous matter. The saliva was flowing from his mouth almost in a stream, and he

smelled so badly that we could hardly stay in the room with him. He had at the same time some trouble with his eyes for which he came to see us, but the loathsomeness of the patient prevented us from doing anything for him. We didn't examine his eyes. We examined his mouth and that was enough. There was such an intense odor that we didn't tarry long with him. Whatever became of him is more than I can say. His mouth was almost completely filled, all the little spaces above and below, were filled. The stench was so excessive that it was simply impossible to stay in the room with him any length of time.

DR. PREWITT.—The great difficulty with Dr. Johnston seems to be the formation of calculi in the nose. Now I don't see that there is any more difficulty there than elsewhere, provided the mucus that is secreted is retained. It is true that nasal calculi are comparatively rare because it is an open space and the mucus is usually gotten rid of. Whenever for any reason the mucus is retained and becomes decomposed, as Dr. Bernays says, these calculi are liable to form. Only a few days ago I made a post mortem in which there was pyelitis, which probably originated in stricture in the urethra and irritation of the bladder extending to the kidney. I found a number of these small calculi, evidently phosphatic in character. Now I have seen the whole surface of the bladder nearly covered with these phosphatic deposits, adhering to the mucous membrane. It isn't necessary, so far as I know, that they should be confined to a small cavity; it isn't necessary that they should be confined to a small crypt like a mucous follicle, in a mucous cavity, provided the mucus is retained. In these cases of chronic nasal catarrh the mucous membrane swells and forms pockets about the folds of the turbinated bone very easily and the mucus is retained and undergoes decomposition, and when the calculus is once started, unless it is dislodged and carried off, accretion goes on. It continues to grow larger and larger. We find them everywhere. We find them in the salivary ducts, in the prostatic glands, in the tonsils, and everywhere where there is a secreting mucous membrane. And as Dr. Williams says, we have this tartar forming upon the teeth in some cases. I have seen such cases where the teeth were all agglutinated together so that they were one continuous mass of this tartar; so that they formed a solid mass, the crowns of the teeth only being visible. That is a formation from the secretion of the salivary glands, and it doesn't require any closed cavity.

Article IX.

TRI-STATE MEDICAL SOCIETY.

Taken by the Journal's Stenographic Reporter.

Fracture of the Radius; Treatment by Rubber Bandage.*

By Edw. Borck, M. D. of St. Louis.

Mr. President; I have not written a paper ont his subject but what I have to say in regard to the treatment of fracture of the radius I can state in a very few minutes. As I will not speak on anything except the treatment, it will be unnecessary for me to say anything about the diagnosis or repeat the experiments which have been made by me and others for the purpose of verifying how these fracturs are produced, neither will I go over the long list of splints; you all are as well acquainted with them as I am. In fracture of the radius I have used all kinds of splints The plain, the carved and the pasteboard splints, etc. etc. with more or less of good success, but I have had the best results from the use of this rubber bandage. Now the radius can be fractured at any place but we recognize generally three distinct fractures, that is, fracture of the neck, then fracture of the middle and fracture of the lower end of the radius. Take now, for instance, fracture of the middle of the radius, the biceps muscle will draw the upper end up and the pronator radii teres will draw it inwards. the lower end is also drawn downward by the pronator quadratus, Now the directions given by authors in the books is to put on a long plain splint on the inside or both inside and outside and allow it to extend below the fingers, well padded. All authors lay especial stress upon the directions that the splint must extend an inch or an inch and a half above and below the arm. Now by following this advice you will find that you may succeed in keeping the fragments from turning inwards. But when you come to look at it the next day you will find that the upper end has tilted up, simply because you left a space here; you couldn't bandage the muscles down with this splint, and the great point

* This paper and the discussion following it ferm a part of the transactions of the Tri-State Medical Society which met in St. Louis, Oct. 25, 26 and 27, 1881.

is to keep the muscles relaxed or you will not be successful. You must prevent the letting up of the broken ends. Now I proceed in this way: I cut my splint the size of the arm, I would rather have it a little smaller than a little too large. I pad this well and use the rubber bandage. Sometimes I use a strong single bandages in the lower part, like a bracelet, and the thin rubber bandage for the other fractures especially when there is much swelling. I find this a very nice, easy plan and I have obtained good results from it in fractures specially of the lower end of the radius. In dressing it I simply use the rubber bandage. If the thin rubber bandage, I make three or four turns and put a little cotton in first. I look at it every day. You would be surprised to see how nicely this bandage keeps the fragments in place. No contrivance that I have ever used has given me so much satisfaction at this simple mode. I did intend to have some of my patients here but one didn't come and the others sent excuses. Now I do not always carve the thumb out as you see on this splint, sometimes I leave that off. I do not bandage the thumb either. I merely put this thumb for the patient to have a guide, in these fractures; I think it is unnecessary. I never do it. I simply make one loose turn and that is all. I have had better results by this method than any other. Now in using the plaster of Paris or pasteboard splint I believe surgeons nvariably put them on the under side and turn them up. I have used them in that mamer too, but lately I have never used them in that way. When I have been compelled or desired to use the plaster splint I put it on from above. I have my assistant hold the hand and the first thing I do is to teach and to instruct my patient to keep his arm perfectly relaxed. Thus, if you instruct your patient he can assist greatly in the treatment of the fracture. When the muscles are relaxed there is not so much trouble to keep the fragments in place.

DR. BOOTH, of Sparta, Ill.—I would like to ask the Doctor to explain one thing. When your splint is not so wide as the forearm, it strikes me that you would destroy the intercostal space and prevent the separation of the bones, and consequently prevent pronation taking place afterwards. I have been in the habit of dressing fractures involving the forearm, either one or both bones of the forearm by a broader splint to prevent the chance of compression. I have used the pistol shaped, ordinary

splint in Barton's fracture or difficulty involving the joint. I think it is very important in order to preserve the interosseous space to have the splint wider than the arm so that you can have no pressure on either one of the bones.

DR. BORCK.—In reply I will say that I pad my splint well. I don't see why the splint need extend above the arm. You can put on enough padding to keep the bones apart. If you desire, you can do that without having the bone enlarged. My object is to prevent the tilting of the bone either at the lower or upper end. Keep the bone in apposition, and the interosseous space takes care of itself, and in the lower end of that bone, you have no interosseous space to trouble you. I have treated these cases in this manner with success. Of course it is necessary to get used to this method. One surgeon will apply one kind of splint much better than he will another, because he is accustomed to apply it.

DR. BOOTH.—I would like to ask Dr. Borck if he would adopt this method of treatment in fractures of the lower extremities?

DR. BORCK.—I can use the rubber bandage very well in some cases of fracture of the lower extremities. If I were treating a fracture of the tibia, where we have tilting, I certainly would prefer to have one splint on the inside molded to the shape of the leg and treat it in the same manner as I do the arm.

DR. BOOTH.—Mold it to the shape of the leg?

DR. BORCK.—Precisely.

DR. OWENS, of Evansville, Ind.—I would like to have the question of Dr. Prince, of Ill. discussed. The question was as to the necessity of quiet in a fractured limb. Whether it is necessary or advisable to keep a fractured limb perfectly quiet. I would like to hear more on that subject, as I am very much interested in it.

DR. FAIRBROTHER, of East St. Louis.—I would like to inquire what is new about Dr. Borck's splint? It is the rubber bandage I suppose. We all use it more or less. It is the old fracture splint. The question is the advantages and disadvantages of the use of rubber bandages. The advantage of the rubber bandage, if there is any, over the cotton bandage is that you don't have to see it so often, it holds its position longer; but, according to

Dr. Borck, it is necessary to dress the patient every day, and that will make too big a bill. In an ordinary case of fracture of a child's leg or arm, we do not go to see him every day, but let him come to the office a half dozen times from the time the fracture takes place until it is healed. It is usual to use the common cotton bandage and a splint like that Dr. Borck has shown. There is an accident of frequent occurrence in fractures of the radius; that is a partial dislocation or a complete dislocation of the ulna of which Dr. Byrd or Dr. Buck have spoken. So far as I have been able to observe among hospitals and surgical cases, the old pistol shaped splint is not used in these cases. It is out of date. It is said its tendency, instead of preventing the dislocation of the ulna increases it, increases the danger, so that the usual straight splint has been adopted in the place of the pistol shaped splint and the cotton bandage is used, the cotton being well padded upon the shingle, answers every practical purpose. It is not necessary, except in rare cases, to undo it, or change or lighten it for a week after fracture.

DR. D. PRINCE, of Jacksonville, Ill.—Mr. President, I suppose this pistol shaped splint just referred to, was introduced for the purpose of overlapping the short fragment of the radius on the long fragment in Colle's fracture, the idea being to make the ulna the fulcrum of pressure, the end being adducted in the anatomical position to prevent the short fragment overlapping the greater. I think the credit is due to Dr. Moore of Rochester, N. Y., of having discovered that there is frequently a displacement of the flexor carpi tendon from its natural position, the posterior position so that the lower end of the ulna is made to take place behind this pushing the ulna forward and as the ulna is pushed forward any pressure by a posterior splint makes it worse, makes the case worse. It prevents the possible replacement of it into its proper groove, so that the deformity is made worse. The ulna projecting forward makes it prominent where it should not be. Dr. Moore, reasoning upon his anatomical discovery, adopted a plan of treatment which consisted simply in placing a small roll—a bandage rolled up in this way—upon the ulna. The fragments are reduced and brought into position to the best possible extent and then this compress is placed upon the anterior surface of the ulna and it is retained by pieces of plaster. Dr. Moore in the enthusiasm of his discovery,

did nothing more but simply directed that the arm be carried in a sling; but in carrying out Dr. Moore's plan, I have found it convenient to use a short splint, a splint extending from the elbow to the distal part of the carpus leaving the fingers and thumb free to movement. It is five or six years since I first observed this dislocation of the tendon, it may be called a dislocation, the tendon is displaced backwards and the ulna is displaced forward. It is a change of location between the ulna and this flexor carpi tendon which passes the groove at the outer anterior portion. The ulna is displaced. Now this compress is intended to keep the ulna crowded back and favor retention of the tendon in its proper groove. I have a short splint which I use and I think it is better than the compress alone. If the compress is simply bandaged around the limb, the bandage must be tighter than is necessary if a splint is employed.

DR. FERREL.—is it possible to recognize the change of place between the tendon and the bone?

DR. PRINCE.—Now it is probable that a section in this case would show that the extensor carpi muscles help to push the ulna forwards. Now when the compress is put upon the ulna, of course it pushes the ulna back. After having this reduced to his satisfaction, Dr. Moore puts on a piece of pasteboard as a compress to keep it from sliding away.

DR. BOOTH, of Sparta, Ill.—Would it not be better to put the compress behind and throw the carpus forward? Is it not better to place the compress behind the carpal bones and throw them forward? The ulna is fixed so far as the upper portion is concerned. It is the radius that articulates with these bones—the, ulna with the intra-articular fibrous cartilage.

DR. PRINCE, of Jacksonville, Ill.—We usually drive the horse not the cart. The carpus is entirely indirectly connected with the ulna. The ulna pushes the carpus forwards so as to twist the lower fragment. The compress pushing the ulna backwards changes its relation to the carpus without any pressure on the carpus itself. I am fully conversant with Dr. Moore's theory, I think, and the practice has resulted much more satisfactorily than the former—the overlapping of the lower fragment of the radius and the overcoming of that overlapping. I am fully convinced that as soon as Dr. Moore's theory becomes generally

known, his practice will be generally adopted. In regard to the use of the rubber bandage, I have nothing to say in addition to the criticism that has been made.

DR. OWEN.—I would like to hear Dr. Prince state his impressions as to whether the fractured parts should be kept perfectly quiet, or allow them to move?

DR. PRINCE.—I have answered that question and I think his answer will suggest itself to everybody at once. You see a sheep running about the pasture with a leg fractured, and if you watch the progress of union in the injury you find that at the portion where there is the greatest amount of motion, there is a liberal exudation thrown out around the fracture; it serves as a nidus for bony deposit, producing a deposit of callus of a very considerable size where there is a good deal of motion. Now in a human subject where there is very little motion you see a very small amount of provisional callus deposited, while the surfaces of bone, if in contact will be cemented together in both cases. Now I say this, if a liberal exudation be encouraged, a larger amount of provisional callus is given out—deposited—and it is very easy to avoid movements afterwards; whereas, if the parts are kept immobile and bandaged this exudation is discouraged and may exist only in the smallest possible amount. Now I have nothing to tell you that has been worked out by actual experience. I present this for whatever it is worth. There is another thing that many surgeons have an enormous idea about, regarding it as absolutely necessary to keep the part absolutely quiet. At first he is apt to labor under the impression that the tighter he bandages the limb, the better it will result.

DR. HILL, of Bloomington Ill.—I am a little surprised at the remarks of the gentlemen that have had a great deal of experience in treating these fractures that it is necessary to dress and examine the broken fragments every day. I think it meddlesome practice to examine a fracture every day or even once a week. I have been in the habit of reducing a fracture, putting it in position and keeping it in position at rest and before the callus has become hardened—in the course of the ninth or tenth day, I have removed the dressing and examined to see that the bones were in apposition, then the limbs were done up with the permanent dressing, and that is all the dressing that is required. I have seen physicians before now who made it a habit to go and exam-

ine a fracture every day and I regard it as a meddlesome practice. You can't go to work and remove the bandage every day or every few days, for that matter without disturbing the fractured fragments of bone. I would not expect good results from such work. If a bone is put into position and the bandages are applied and then the bandages become too tight, then of course it is necessary to loosen and readjust them; or if the bandage becomes too loose on account of the subsidence of the swelling, it is necessary to tighten it, but otherwise I would not undo it until the eighth or ninth day, and I would then put on the permanent dressing and the arm or broken bone should then be kept at rest for three or four weeks at least.

For setting fractures of the forearm there are a great many apparatuses in use. I oppose the use of plaster of Paris for the very same reason that I should object to the rubber bandage: from the very fact that you are liable to make pressure so as to force the fragments down into the inter osseous space and thus destroy rotation. I find that the immobile apparatus is very useful.

DR. JOHNSTON, of St. Louis.—In regard to the question asked Dr. Prince as to the necessity of keeping a broken limb immobile, I would answer that according to physiology, it should be kept perfectly quiet, and such medical appliances made as to prevent excessive reaction and to prevent septic matter being thown out, so you should keep the parts as near the normal condition as possible; so that every surgeon, I presume, aims to keep the limb as quiet as possible until the injury to the soft parts heals, the irritation subsides and the exudation is thrown out, that he might bring about action so as to cause absorption of the exudation and plastic matter be thrown out. I think it is a plain physiological proposition that the parts should be kept quiet until the inflamed state and the reaction subsides.

DR. BORCK.—In answer to my friend, Dr. Fairbrother, I will say that he is mistaken if he understood me to say that I examined and dressed the fractued parts every day because the rubber bandage was applied. I didn't say that. I say you should look after the fracture every day, but don't remove the splint. I didn't say you must remove the splint, as the other gentleman, Dr. Hill, understood me I do not advocate such a proceeding at all. I do say you should look at the fracture every day. So far

as the question of the fee is concerned, that doesn't belong to the treatment at all—not a particle of it. If a surgeon takes upon himself the responsibility of treating a fracture, no matter where, he should not stop to think about the fee—one hundred fees would not pay for a deformed limb. If he doesn't look at it for eight or nine days, and always has a good result, he is more lucky than many others have been. He may find he has made a mistake and a deformity may result. I advise you to look at your fracture every day, and if you do not wish to treat the fracture and spend the time, send the patient to some one who will. In reference to the pistol shaped splint, I think it is unnecessary. The straight splint is just as good in many cases.

DR. HILL.—Perhaps I have misunderstood the gentleman. I understood him to say, "I remove the bandage and examine the fracture every day."

DR. BUCK, of Springfield, Ill.—I want to occupy a single moment in referring to the discussion of the physiological process going on in the course of the repair of fractured bones, and I may be able to assist in settling this question. There was a time, when it was considered necessary, at least by the laity, and some of them have the impression yet, that they have to bear pain, that the parts must swell up and cause pain in order to effect a cure, and I believe that a certain amount of irritation is necessary to provide the material which is to unite the fragments. Dr. Johnston in his remarks, insisted on keeping the parts as near the normal condition as possible; now I imagine there would be no curative change if the bones were kept in a perfectly normal condition. Dr. Prince, on the other hand, thinks that in some cases at least so far from keeping them quiet, a mild irritation stimulates them to throw out reparative material. It strikes me that Dr. Prince may be right in his ideas.

DR. REBER, of Shelbyville, Ill.—I wish to say a few words in regard to the point of the advisibility of complete immobility, whether it ought to be secured. The question is, whether you can maintain complete coaptation without securing complete immobility. The probability is, that it would not be safe to allow the idea to go forth, that it was not necessary to secure complete immobility in the fragments of a fractured bone.

Reports from Hospital Practice.

Article X.

Dispensary of the Missouri Medical College, St. Louis, Mo. Service of James P. Kingsly, M. D. Reported by Elmer L. Legge, A. M.

Infantile Paralysis of both Lower Extremities.—Walter W.— æt. two years, was first seen Dec. 2. Child well nourished, general health good; absence of hereditary predisposition to neurotic diseases; no history of previous injury or disease of serious character; hygienic influences surrounding child, malarial; besides residing in a malarious part of the city, the floor of the living room of the family rested on low ground.

During August of last year, the child was taken on a long journey across the city, walking several miles through the dusty streets, and with the thermometer ranging over one hundred degrees Fahr. Weary and altogether tired out, upon returning home late in the evening, the mother bathed the child in a tub of cold water. During that night the child was seized with a high fever, which continued for three days, after which was noticed some loss of muscular contractility and power of motion in right lower extremity, followed later by muscular atrophy of that extremity. The fever subsided at the end of three days and did not come on again. Sensibility remained unimpaired in every part of the limb, with the loss of power of movement at no time complete, however very nearly so. Three weeks after loss of power was detected in right lower extremity, a corresponding loss of muscular contractility suddenly appeared in the left lower extremity.

When mother first presented child at the clinic, she stated that he had not walked since the paralysis was observed in September. The lower extremities were from one to three degrees lower in temperature than the upper corresponding extremities; the right lower extremity having a lower temperature than the

left, as well as a greater loss of muscular power. In no other part of the body was there manifested any symptoms of neuroses. The general state of digestion not impaired, appetite keen, condition of bowels normal, complained of no pain at any time.

Treatment, electrical and mechanical, no medicine given until recently, then Fowler's solution.

Gradual improvement, functions of left lower extremity more rapidly regained than of the other limb. The child is now almost cured.

It might possibly be of some passing interest to mention here that which may seem strange enough, a mistaken diagnosis. The mother stated that before coming to the "Missouri Clinic," the child had been examined by a surgeon and the loss of power in the extremities diagnosticated as being due to disease of the hip-joint.

DIABETES MELLITUS.—Mary C.— æt. sixteen, never having menstruated, tall, delicate girl, was presented for treatment during the first week in October, 1881. The mother's history of the child antecedent to present disease was obscure, and and that given relating to the present disease, not satisfactory.

Father and mother healthy, other members of the family strong and robust, no phthisis or epilepsy known in family stock. The girl has been sick for nearly three years, presumably with disease, seen and prescribed for by several physicians, no two prescribing the same course of treatment; just what plan of treatment was selected by the individual physicians, is not certainly known.

The exciting cause is probably exposure, presumably the excessive use of saccharine articles of food, associated with some low form of febrile disease. The symptoms come on gradually, the disease not being discovered for months after its onset. The first suspicion that the patient was going wrong, was excited by a large increase in the urinary secretion, the girl rising many times during the night to void the urine. Failing strength and rapid loss of flesh followed in quick succession, attended by an excessive and increasing appetite, and insatiable thirst. Further loss of flesh and strength until patient became sadly emaciated; digestion deranged, bowels constipated and mind depressed.

When patient first came to clinic, she was much emaciated, discouraged, and saddened. Previous to this time no attention had been directed to the selection of proper food and hygienic

surroundings. She was passing urine in large quantities, of a specific gravity of 1034, very sweet to the taste, the known test of sugar, showing the proportion of sugar to be large. The breath was intolerable, tongue clear and flabby, gastric disturbance, flatulence. Eye-sight affected.

The child insists that she is going to get well, at any rate, many of the distressing symptoms have yielded to treatment. She is cheerful, good natured, hopeful, eats more moderately, drinks less water, voids less urine and none at night, however, specific gravity remains unchanged (1034).

Treatment, all food containing sugar, or articles convertible into it, (bread, potatoes, rice and tapioca, and such vegetables as turnips, cabbage, carrots, peas, and indeed all foods rich in starch,) were strictly forbidden to be eaten. Animal food of any kind, broths and soups, eggs, cheese and cream with gluten bread and biscuit was directed for the patient. The patient was allowed to drink no more water than enough to allay thirst. Exercise in open air. Medicine given, fluid extract of ergot, twenty mimins three times a day during October and November. In December, lactic acid was substituted for the ergot, in doses of twenty minims, three times a day after meals. Child growing on to improve.

Reports on Recent Progress in Medicine.

Article XI.

Reports on Dermatology. By R. W. Wilcox, M. D.

The Mask Treatment of Eczema.— Eczema of the face and head so common in children, in many cases fails to be relieved for the simple reason that the applications are not closely applied to the diseased surface. To remedy this deficiency a mask is here in use, a piece of cloth with holes for the eyes, nose and mouth, with slits for the ears to assist in keeping it in position. The ointment is to be thickly smeared over the mask and it is to be worn constantly, only being removed as lotions are applied. At the outset, the mother's pride is wounded, but after a few days the benefit is so apparent that the objection is no longer made. This treatment effectually prevents the scratching which so thoroughly thwarts all endeavors. Of course any ointment can be used, but for the most part, Diachylon, very carefully made, is selected. As material for the mask one sees how ordinary coarse flannel, which it seems would be objectionable on account of the heat being retained, but there appears to be no objection to the use of ordinary muslin. In something the same way a skull-cap can be made, the inside of which smeared with the ointment, can be used for eczema of the head.

Leiter's Heat Regulator.—Under this name is known an apparatus which meets with much favor, not only in the skin wards, but as well in other departments. It consists of a flexible metalic tube of small diameter (one half centimeter) of any convenient length, say two meters, doubled on itself and then coiled after the manner of a watch spring, as round, oblong, square or rectangular in form, the adjacent turns being held together by extensible tapes. Rubber tubes a meter or so long, are attatched to the two open ends, and these have ordinary lead sinkers for retaining the ends in the water-containing vessels.

This completes the ordinary apparatus, but the more elaborate forms are fitted with a thermometer and lamp, with a reservoir containing a tube coiled as in a still, in the course of the circuit. To use this apparatus it is necessary to have a reservoir of water at a little elvation and a receiving vessel at a lower position than the part whose temperature is to be regulated. Then adapt the apparatus to the part, insert the tubes into the respective vessels of water, and start the siphon. When the upper vessel is nearly empty, by reversing the places of the vessels, the flow is continued. The temperature of a part can be regulated as far as it is possible to regulate it, by external agencies, without disturbing the patient, and without wetting the clothing, or the bed. By this plan, either dry heat or dry cold can be applied in what seems to be a satisfactory manner. One objection suggests itself that the weight of the apparatus on a diseased surface might be painful to the patient.

INITIAL LESION ON LIP.—Considering the rarity of this, it seems well to record this one case. Patient, a man about 35 years old, without any history, not a smoker, presented himself with an induration of the lower lip extending from the middle line nearly to the left commissure. The glands in the submaxillary region of that side slightly hard, cervical and other glands normal. The induration presented a denuded surface about a half centimeter in diameter near the mucous border of the lip which discharges a small amount of thin sanious matter; the duration of the induration was about five weeks. Being given some simple remedy, he presented himself at the expiration of a week with a beautiful roseola on chest and abdomen, thus establishing a diagnosis to which the peculiar induration pointed.

LOUSE DISEASE.—It is hardly possible for an American to imagine the formidable looking results that come from the presence of a simple parasite. Filth and lack of care often coupled with cachectic conditions gives, to a stranger, anything but a favorable prognosis. But the thorough application of petroleum, rest and good hospital care at end of a fortnight renders the improvement so marked that the patient is hardly recognizable.

SCABIES.—The first impulse of the Dermatologists have, when an apparently unexplainable or obscure eruption presents itself, is to examine the inter-digital spaces and the flexor aspect of

the wrist and forearm. The percentage of successes in finding well marked burrows is somewhat astonishing. One of the diversions of the clinic is to have some six or more men and boys in line, stripped; let each take a portion of Vleminckx's or Unguentum Wilkinsoni in their palms and rub it in on corresponding portions of the body in concert. After all the accessible portions are covered, then standing in file, each anoints the back of the man standing in front. After the first and last man have had their private seance, the operation is complete. Generally one application is sufficient, care being taken in regard to the clothes.

PRURIGO.—Another novelty is the number of cases of Prurigo seen here. At first the diagnosis did not at all appear clear, but the following points are here considered. Prurigo is here distinguished from scabies, in that the genitals remain free, no burrows are to be found, its duration from early childhood and the highest manifestations are on the legs. From simple Pruritus cutaneous by the infiltration of the skin and absence of any such general condition as Diabetes, Eczema chronicum universale is the diagnosis that most of the cases would suggest that the manifestations on the flexors of the joints and on the genitals would serve to exclude Prurigo. If both diseases be combined, all that the authorities here say, is "one must first treat the eczema." Ichthyosis would be excluded by the presence of excoriations the results of pediculi vestimentorum by the most marked manifestations on the shoulders and loins and the excoriations would be longitudinal. The treatment commonly seen here is a thorough inunction of Vleminckx's solution, and then a warm bath for three or four hours twice daily. Another treatment is painting with tar and then the bath. In the majority of cases, general treatment is demanded. In the cases seen, a mask treatment makes a great improvement in the appearance of the skin, the condition of the patients and the amount of itching.

LUPUS.—Several cases seen here, have been treated by simply scratching out the diseased tissues with a Volkman's sharp spoon, the places of erosion being covered in the interval by some simple ointment spread on a bit of muslin. The comparative painlessness of the operation, when the general failure of drugs and

the uselessness of excision is considered, seems to mark this as the best treatment.

ACNE.—No addition to the medical treatment has been presented, but in the Clinic is seen a new instrument for removing collections of pus as well as comedones in that form which originally was a seborrhœa. The watch key so often recommended is painful, and can not always be successfully used on that account. Later the improved watch key suggested by Kaposi, which was simply a watch key on a large scale, but the rim made broader, so that it would not cut in so deeply. The present instrument is an ordinary Volkman's spoon with a small perforation at the lowest point in the bowl, and this perforation having its edges carefully rounded off. The advantages being that the point of application can be perfectly adjusted, the perforation does not detract from its other uses and the pressure being diffused over a larger area, less pain is caused.

BATHS.—Under prurigo was mentioned the fact of baths holding an important place in the treatment. Generally prurigo, psoriasis, eczema and burns are the only diseases treated in this manner. Of course many desired medicaments can be added, but as the experiments show, some with doubtfut advantage. In eczema one finds more in the books, than in actual use at the Clinic. The other exponent of the water treatment, is the water bed, in which a pâtient remains almost constantly, the water being changed every six hours. A few cases of general psoriasis seen under this treatment in ten days the infiltration became markedly less, the scales were thoroughly macerated, and color became almost normal. It is claimed that the best effects are seen in burns of moderate severity, the advantages are, the pus being constantly removed, the necessity of changing the dressing being done away with, and the cicatrix is said to be more extensible.

NAPHTHA.—One of the latest additions to the pharmacopœia of Dermatology, is naphtha. At present it is being quite extensively used in psoriasis and other scaly eruptions. At this time but little can be said of its actual value, but many claims are made for it.

Vienna, Oct., 1881.

Clinical Reports from Private Practice.

Article XII.

Congenital Absence of Anus and Rectum.—Fistulous Communications between Rectum and Vagina. By Robt. C. Waters, M. D., of Perryville, Mo.

On July 19, 1880, I was requested by Dr. W. P. Newman to visit with him, an infant, the subject of a congenital deformity. The child was of a sanguineous temperament and evidently very large and healthy looking for its age—only five days. Upon examination we found we had to deal with congenital absence of the anus and upon further examination, fistulous communication between the rectum and vagina, through which the fæces passed quite freely. The rectum terminated in a *cul de sac*, and the recto-vaginal fistula was situated probably one-half inch above the lower portion of this *cul de sac*. The vaginal terminus of this fistula alternately contracted and relaxed after defecation, very similar to that of the sphincter ani after an ordinary evacuation. By means of a bent probe we estimated the deficiency of the rectum or the space filled with connective tissue between the rectal terminus and the anus, to be about one-half an inch. knowing the tendency to callosity which exists in all fistulæ, I advised immediate operation as offering the best chances for turning the fæces into their normal channel, and thinking it would obviate the necessity for closing the recto-vaginal fistula, by present or future operation.. Accordingly we selected Saturday, July 24, for performing the operation. We deemed it best not to administer anæsthetic both on account of the minority of the patient and operation. I introduced a combined grooved director and aneurism needle, as a guide, into the *cul de sac*, and gave it to an assistant. Selecting a suitable bistoury, I divided the integument through the median raphé and endeavored to tear the tissues with a scalpel handle, but found that they could not be torn, consequently I divided them with the bistoury. I easily succeeded in reach-

ing my guide, and introducing a probe-pointed bistoury, I enlarged the opening to what I thought sufficient. My first division of tissues, however, gave rise to a considerable hemorrhage, which I now found I could not check so easily. I could not succeed in catching the vessels, although sure the hemorrhage was arterial. I tried cold and then compression, and failing, I introduced a tampon saturated with Monsel's solution and placed simple cotton on top of it. By this means I arrested the hemorrhage. I directed the parents to let the child alone until I could see it again, and not to remove the tampon by any means. We called again July 26, and found tampon had been passed and with it fæcal matter. I now (following the injunction of Erichsen) tried to draw down the rectal mucous membrane and fasten it to the integumentary margin of the anus but could not. I could not even tear it loose with the scalpel and did not fancy the dissecting in this region on account of the previous hemorrhage. Consequently, I concluded to let it alone and use dilations by an improvised dilator, using the rubber case of a clinical thermometer to begin with. This part of the operation I entrusted to a maternal grandmother in the absence of a more suitable person. The patient being twenty-two miles away, we could not give the case the attention it would have been given if it had been nearer to us. The dilatations were continued daily for about two weeks, and everything seemed to be progressing nicely, when the mother concluded that it gave the little babe too much pain and discontinued them. As a matter of fact, the artificial channel degenerated into a fistulous canal which eventually closed entirely and the fæces passed through their previous channel. However, through the two weeks and probably a month longer, the fæces continued to pass through the artificial channel. Of the cause of this peculiar mal-formation, we know but little, yet experimentation upon the lower orders of creation has enabled physiologists to give us an explanation somewhat satisfactory. For instance, we know that the rectum is developed from the external blastodermic membrane and that the large intestine, stomach etc. is developed from the internal blastodermic membrane; that the large intestine and genito-urinary system in primitive life terminate in the umbilical vesicle. That no anus exists, for a septum is placed between the anus and rectum and the rest of the large intestine; and that persistence of this septum gives rise to one of the most common forms of this peculiar congenital deformity,

known as congenital closure of the anus (Erichsen). Now from the premises to the conclusion is but a short step. Evidently the communication between the intestine and the genito-urinary organs persisted and the septum was not absorbed. The non-absorption of the septum caused the lower portion of the rectum and the anus not to be formed. The pent up fæces sometimes finds an exit through the bladder, but evidently this only occurs when the absence of the rectum amounts to some two or three inches. Erichsen says that hemorrhage in the performance of this operation, usually proceeds from the inferior hemorrhoidal vessels. In my case it evidently came from them. He likewise states that unless you bring down the mucous membrane, the operation will fail on account of the fistulous degeneration of the canal. I did not want to use Monsel's solution in this case on account of its defeating my ultimate object, viz., bringing down the mucous membrane. This fistulous degeneration is partially proven in my case, but not entirely. However, it would probably have occurred upon the cessation of dilatation. After the operation the little patient suffered from shock, but rallied and doing well, in spite of the the gloomy prognosis of a number of ancient "gross-mutters."

I am informed by Dr. Newman that the little girl died during the past summer, from cholera infantum.

Periscope.

Article XIII.

MATERIA MEDICA AND TOXICOLOGY.

Report on Yerba Santa—Its Therapeutic Uses.—Within the last two or three years there have been brought to the notice of the medical profession a large number of new remedies, many of which, it is true, are worthless, but among the long list we find a few which merit our consideration. One of these, to which I desire to direct your attention this evening, is Yerba Santa, or Eriobyction Californicum, which has proved, in my hands, a valuable therapeutic agent.

The fluid extract of the leaves is, I believe, the only preparation in the market, the dose of which is from ten minims to one drachm.

As a remedy in all forms of acute inflammation of the air passages it is useful. It may be used alone in solution with glycerine, or in combination with expectorants or anodynes. I prefer the former method of administration, as glycerine is the best vehicle, and makes a better solution than syrups or water, both of which precipitate the gummy portion of the preparation.

Its mode of action I am not prepared to assert positively, but am of the opinion, from my observation of its effects, that it acts specifically upon the mucous membranes of the air passages as an astringent. Further observation of the effects of the drug will doubtless demonstrate its physiological action.

It is not my purpose to enter into an elaboration of theories or facts, but simply to bring to your notice the types of cases in which I have found the drug prove beneficial, by citing one case of each type, which will serve as examples, and demonstrate the classes of cases in which it may be used.

I.—*Acute Bronchitis.*

Mrs. M., aged 30, has been subject to one or more attacks of bronchitis every winter. The attacks have invariably been very

severe in character, with much bronchial irritation and incessant harassing cough, to such an extent as to prevent sleep either night or day. The acute stage of the attacks would usually last six or seven days, in spite of all the orthodox remedies, and it would be three or four weeks before the cough finally ceased.

I was called to see her one day, at about 3, P. M., suffering from an acute attack of bronchitis, which had begun the night previous. Cough was incessant, and substernal distress very great. Having in view my former experience in her case with different remedies, I concluded to try the Yerba Santa.

I therefore prescribed the remedy in half drachm doses of the fluid extract, to be taken every three hours. Three doses were taken before bed-time. After the first dose, the cough was ameliorated, and upon taking the third, she went to bed and slept without awaking the entire night.

She continued the medicine the two following days, and was entirely relieved. My attention was arrested by the rapidity with which the acute inflammation of the bronchial tubes was controlled. There was no second stage; no secretion of mucus after the first few doses. The attack appeared to have been aborted.

I have used the remedy since then in a number of cases of acute bronchitis, and always with a favorable result.

2.—*Laryngismus Stridulus.*

A child eight years of age is subject to repeated attacks of bronchitis every winter. Upon the advent of the inflammation, as is frequently the case with delicate children, this child after going to bed at night, would be invariably seized with an attack of laryngismus stridulus.

Having been called to see her in the beginning of an attack of bronchitis, I prescribed the Yerba Santa in ten minim doses every three hours. The cough was modified, and she passed through the attack without having experienced the distressing laryngismus.

This case directed my attention to a new use for the drug, and since then I have used it in several similar cases as a prophylactic. A dose of the remedy administered at bed-time to children subject to spasm of the glottis, was never followed by an attack.

Whether this was *post hoc* or *propter hoc* may be questioned,

but, from the uniformity of my experience, I am of the opinion that the freedom from attacks was due to the remedy.

3.—*Bronchorrhœa.*

I was asked to see an infant, aged 2 years, affected with a bronchitis of several weeks' duration, with profuse secretion of mucus, which, owing to the child's age, blocked up the air passages and seriously interfered with respiration. Was informed that the usual remedies had been given without producing any result. Ordered Fl. Ext. Yerba Santa in five minim doses, three times daily. In four days the profuse secretion was entirely arrested and the child rapidly recovered.

In adults, as well as in children, I have witnessed its beneficial effects in arresting bronchorrhœa.

4. The cough of measles I have often seen relieved by this drug. It is more palatable to a child than the orthodox remedies, and as it does not disturb the stomach is much more desirable.

Thus, gentlemen, I have, without wearying you with details, briefly outlined the types of cases in which Yerba Santa has proved useful in my hands, leaving you to judge whether it may prove as beneficial under your administration, and to decide upon its value as a therapeutic agent.

To summarize, we may say that Yerba Santa will rapidly relieve acute bronchitis, is a prophylactic for laryngismus stridulus, will arrest profuse secretion of mucus in chronic as well as acute bronchitis, and is useful in allaying the cough of measles.

As to its use in chronic bronchitis my success has not been so uniform. Although relieving some cases, in the majority, after giving it a fair trial; I was compelled to abandon its use and resort to other remedies.

I never find larger doses than one-half fluid drachm necessary, although it may be given in much larger doses without producing any ill result.—[*New Orleans. Med. and Surg. Journal.*

METHOD OF USING ELECTRICITY IN DIPHTHERIA.—Dr. G. K. Smith (*Proceedings of King's County Med. Soc.*, Aug. 1881), states that he has employed electricity with great advantage in diphtheria. His method is this. He places the feet of the patient in a bath of water as hot as it can be borne with comfort,

and he puts in that water one, two or three tablespoofuls of saleratus. He then takes a glass of cold water and puts some saleratus in it, and with this solution wets the electrode which is to be applied to the throat. The negative pole of the battery is put into the bath in which the feet are placed. The positive is to be covered with cotton and used in the throat, on the tongue, and in the nose if it be needed there. Of course the sponge-handles or ordinary electrodes cannot be used in these localities; but a very convenient one for the mouth and throat is made by covering the blade of a dinner knife with a thin layer of cotton, which is to be soaked with the solution of saleratus. The cotton also serves to keep the soft parts of the mouth and throat from direct contact with the metal which otherwise would cause pain. The mouth should be kept open, so that the teeth will not touch the electrode. A convenient electrode for the nose is made by winding a thin layer of cotton on a wire. Thus prepared, the patient is seated in a chair, if able to sit up. The feet are placed in the bath, and the patient holds in his lap a basin to catch the saliva as it flows from the mouth, or as he has occasion to spit it out. The physician should be careful not to sit in front of the patient, for fear that the patient will cough and blow his poisonous secretions in his face. Dr. Smith remarks that two of the members of the society have died from getting in the mouth the secretions of patients on whom they had performed the operation of tracheotomy. Sitting near the right side of the patient, he dips the electrode into the saleratus water to wet the cotton; then placing it on the tongue, he holds the knife by its metalic handle in the left hand, while he lays the right hand very gently on the sponge of the positive electrode. The current will now pass through the operator, and he can regulate the power of the current to the ability of the patient to bear it without pain. If he wants a stronger current, he can grasp the sponge a little tighter. As soon as the patient becomes accustomed to the current on the tongue, the operator may pass it (the electrode) gently up to the side of either tonsil. Watching a good opportunity, he can now pass it back to the posterior wall of the pharynx, and even down to the epiglottis. This last position is likely to make the patient cough, and will in some instances, make him vomit. In either case, mucus in large quantities will be thrown out, and it will become necessary to remove the electrode; but before this is done, the current should be broken by raising the

right hand from the sponge electrode. The cotton on the electrode should be secured by winding a little thread around it, and the operator should be careful not to let the electrode touch the teeth, as that will cause pain. If the current passing through the operator be too weak, he may bring the positive sponge up and touch the handle of the knife. The electrode must be removed occasionally, to give the patient a chance to breathe, to spit, etc. It is not necessary to use a strong current. The electrode for the nose can often be passed back as far as the posterior wall of the pharynx.—[*London Medical Record.*

Editorial.

Article XIV.

The forty-second volume of the Journal begins with a brighter out-look for its future usefulness, than it has hitherto enjoyed. We hope that our friends will not forget the request we made in our last number, and that they will not hesitate to co-operate to make all our numbers replete with interesting items culled from their practice.

In this number we present the first of a series of lectures on fractures and dislocations, by Prof. Jno. T. Hodgen, and in the near future a similar series on operative procedures in obstetrics and gynæcology by Prof. G. M. B. Maughs, will be begun.

The Journal will be continually improved in excellence, and will continue in the future, as it has in the past, be the leading medical monthly of the Mississippi Valley.

This begins the thirty-ninth year of its existence, and of its usefulness, and we would like to see it not only more useful, but indispensable to all who take it. We hope our readers will aid us and with many wishes for a prosperous year, we begin once more with renewed ardor, the task of endeavoring to please our patrons.

Book Reviews.

Article XV.

☞Notice.—In order to secure reviews of books it will be necessary to send duplicate copies of the same. Authors sending reprints will please remit them in triplicate in order to obtain notice in this department. In all cases, where *single* copies of books or pamphlets are sent, a mere acknowledgement of their receipt only will be made.

The Physician's Daily Pocket Record. Comprising a Visiting List, many useful Memoranda, Tables, etc. By S. W. Butler, M. D. (Philadelphia: Published at the Office of the *Medical and Surgical Reporter*, 1882.)

This visiting list is a good one as the number of years it has lived attests. It contains first, a perpetual almanac, next a posological table and then the various matters usually found in these lists. It is designed for thirty-two patients per week, and is perpetual, the dates being left blank.

The cover closes with a spring, and altogether it is one of the neatest and handsomest lists which we have received this far. It is small, durable and cheap, and we can heartily recommend it.

Transactions of the American Gynæcological Society. Volume V. for the year 1880, 8vo. pp. 170. (Boston: Houghton, Mifflin & Co., 1881.)

This, the fifth volume of Gynæcological Translations, is fully up to the high standard which has been established in the former volumes. The papers are all valuable and interesting, and by men whose standing in genæcology is good. The President, Dr. J. Marion Sims, in his annual address, asks that the Society be more liberal and broad in its views as far as the constitution and by-laws are concerned.

The indications for normal ovariotomy are discussed in a paper by the reviver of the operation, Dr. Robt. Battey, in a paper entitled: What is the Proper Field for Battey's Operation?

Two cases of anterior displacement of the ovary simulating inguinal hernia, and in which Battey's operation was performed, is the subject of one of Dr. Engelman's papers, the other being Posture in Labor: an Ethnological Study. This is a very long

and exhaustive paper, and withal interesting, the discussion which follows being no less so.

There are eleven other papers of great value and which all elicited discussion. Then follows indices. There is among them an index to the gynæcological and obstetrical literature of all countries for 1879, an index to obstetric and gynæcological journals and one to obstetric and gynæcological societies.

The book is handsomely gotten up, and does infinite credit to the publishers. It is gotton up in a European style, the leaves not being cut.

A PRACTICAL TREATISE ON IMPOTENCE, STERILITY, and Allied Disorders of the Male Sexual Organs. By SAMUEL W. GROSS, A. M., M. D. 8vo. pp. 174, with sixteen illustrations. (Philadelphia: Henry C. Lea's, Son & Co., 1881. St. Louis: St. Louis Book and News Co.)

The work is divided into four chapters, the first devoted to impotence, the second to sterility, the third to spermatorrhœa and the fourth to prostatorrhœa. The author recognizes atonic, psychical, symptomatic and organic impotence, discussing each variety clearly. The author says that he never saw but one case of psychical impotence in his practice, and yet it would not seem to be such a rare affection.

Sterility, he finds due to either of three causes: azoospermism, aspermatism or misemission. The causes of these conditions are pointed out, as also the proper treatment to be pursued.

The diagnosis, treatment and classification of the subjects considered are given in clear and terse language, and he insists that in sterility the husband is at fault almost once in every six cases. He also wishes to point out one error—that impotence and spermatorrhœa are commonly described as functional diseases the testicles, whilst he has found them, for the most part, dependant upon reflex disturbances of the genito-spinal centre induced or maintained by lesions of the prostatic part of the urethra.

The mechanical work is excellent, the type being large and clear and the binding neat. On the whole, this is a brochure which will well repay an attentive perusal of it.

TRANSACTIONS OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA. Third Series, Vol. V., pp. 800, cxl—141. (Philadelphia: Printed for the College and for sale by Lindsay and Blakiston, 1881.)

This is a very neatly gotton up volume, containing the papers read before the College from Aug., 1879, to July, 1881. Memoirs of Drs. Geo. B. Wood, Isaac Hays, John Marshall Paul,

J. A. Meigs, T. L. Leavitt, John Neill, and Isaac Ray precede the transactions proper.

Foot-Binding in China, by Robert P. Harris, is the first paper, occupying seventeen pages and being a clear exposé historical, descriptive and anatomical of this wide-spread custom in China.

The next paper is a very interesting account of a case in which heart-clot occurred as a consequeuce of uræmic convulsion and tumors in the heart, by Arthur V. Meigs.

The reports of the committee on meteorology and epidemics for the years 1878 and 1879, are interesting despite the formidable array of dry figures and tables. A case of general hyperostosis, by James H. Hutchinson, is illustrated with two fine heliotypes, and is one of unusual interest. The treatment was experimental, consisting of ten grains of oxide of potassium thrice daily. The patient improved slightly.

Prof. Da Costa, contributes a valuable paperon starvation fever.

Foot-Binding in Ningpo, China is a supplement to his paper on foot-binding by Robert P. Harris. J. Ewing Mears reports a case of diabetes mellitus in which double cataract existed. The patient died three days subsequent to an operation of extraction. The autopsy threw no light on the connection between the diabetes and the cataract; it would seem from other indications observed by the author, that there was no such connection as is sometimes observed.

The concluding paper is by Geo. Hamilton, upon vivisection, with reference to its restriction by legislative action, and is a thoughtfully considered paper.

MEDICAL COMMUNICATIONS of the Massachusetts Medical Society, Volume XII., No. 7, 1881. 8vo. pp. 473-671, 191-254. (Boston: printed by David Clap & Son, 1881.)

The first article, numbered 21, is an address by J. C. Collins Warren, on Medical Societies: their organization and the nature of their work. It is an estimable work, dealing with many matters such as are *en rapport* with medical societies.

On June 7, 1881, the Society held a meeting in commemoration of its first centennial anniversary. On this occasion Samuel Abbott Green made a Centennial Address, which is a pleasing and entertaining history of the Massachusetts Medical Society.

Following this are the Proceedings of the Counsellors, the Annual Meeting held June 7, including a full account of the Dinner held, and which has already appeared in various journals.

The proceedings are printed in large, clear type, and when the various parts are bound together, will make a very handsome volume.

THE MOTHER'S GUIDE IN THE MANAGEMENT OF INFANTS. By JOHN M. KEATING M. D. 18mo. pp. 118 (Philadelphia: Henry C. Lea's Son & Co., 1881.)

This little volume is divided into three parts, the first devoted to the general management from birth to dentition, the second to the general management during dentition, and third to the management after early dentition. The first two are far the larger and more important parts, and the whole, as its name indicates, is rather intended for the laity than for theprofession.

We would object to it, however, that it contains too little information in regard to treatment of various disorders considered, for the physician, and a little too much for the mother. We are decidedly opposed to putting sharp-edged tools in children's hands, and this is what our author does in deluding mothers with the belief that they are competent to treat their infants for such disorders as convulsoins, croup, catarrhal diarrhœa etc. Of course he partly remedies this defect by giving the sound advice of procuring a physician and only having recourse to to drugs in his absence; still an awkward friend is a very inconvenient person to have about.

The author's dietetic rules are good in the main, and if carefully followed, of some value. He remarks very sensibly, that there is a certain experience which "cannot be learned from books; it cannot be learned from lectures; it can only come from a daily repitition of the duties of the nursery. No woman, however much she may read and study, can learn from it to hold a baby, or to wash a baby, or even, I may say, to dress or feed a baby." He furthermore advocates having a nurse who properly understands the care of infants.

Bottle-feeding and the choice of milk are considered at some length, as such subjects deserve. Altogether this is a handy and useful little book, which is well adapted to young mothers.

A PRACTICAL TREATISE ON NASAL CATARRH. By BEVERLY ROBINSON, A. M., M. D. (Paris) pp. 182. (New York: Wm. Wood & Co., 1880.)

In 1878, I stated to several gentlemen, who were discussing, in private, the most appropriate name for the American Laryngological Association, then in process of formation, that such advances in the study of the diseases of the nose would, in a few years be made, that the consideration of laryngitis would lose its rank in importance, and would be made to take, what I thought was its proper place, a secondary disease; and that in a very few years, those of the profession who were giving particular attention to laryngology, would see that every throat complaint, not specific or traumatic, was always preceeded by an inflammation of the nasal and pharyngo-nasal cavities. Also, that all the

advances made in the treatment of laryngitis, would be made by those who took the diseases of the nasal passages into consideration while treating the throat.

The appearance of this work so soon after these remarks, as well as the ushering in of other treatises on the same subject, shows, in part, that my assertions were correct. In afew years, what I then said, will be agreed to by the whole profession.

I have read Dr. Robinson's book through carefully, as I do every new book on this and allied subjects, and have made many marginal notes. While it does not quite come up to the standard of my ideas in the hygiene and treatment of the nose, yet it is far, very far in advance of any work that I have seen come from the East. His preface is short, 12 lines, and merely states his intention to make his book contain "a succint, though complete account of personal experience and convictions, and then, if possible, render it valuable as a practical guide to others."

THOS. F. RUMBOLD.

A MANUAL OF DISEASES OF THE THROAT AND NOSE. By F. H. BOSWORTH, A. M., M. D. 8vo. pp. 427 (New York: Wm. Wood & Co. 1881.)

In his preface he says: "The following pages are the result of an experience extending now over nearly ten years." His practice has been partially private, but mainly in the Bellevue Clinic for diseases of the throat. "I have endeavored to confine myself to my own personal experience, recording with candor and fidelity, both the method and measure of my success, and with the same candor, acknowleding the difficulties and disappointments which have attended the management of those diseases in the treatment of which I have failed of full success."

In his first chapter he describes the use of the laryngoscope, and the relative position of the physician to his patient. It is really remarkable that, in this work, as in almost every other work on the same subject, the patient examined, represents a gentleman. He is illustrated as being straddled by the examiner. The probable reason for not illustrating a lady patient as the one that is being straddled, may be on account of the well known modesty of the author, who would no doubt shrink from exhibiting in public, his method of disposing of his lower extremities while he was viewing a female's arytenoides.

This position of the physician is not only a very inelegant one, but a very incovenient one. If our author's illustration on page 8 is true to nature, (and, judging from our acquaintance with his physiognomy, it looks as though he had been photographed while in the act of making an examination), his eyes are at least 24 inches from his patient's vocal cords. This is too great a distance for exact observation. If a physician, in examinging a throat or nose, will sit at his patient's left, so that the

thighs of each will be side by side, then, when both turn slightly to the left, the faces of both will be opposite to each other, and within 10 or 12 inches. At this distance, an examintion can be made with precision and with ease.

It is noticable that he always applies the tongue depressor with his own hand, instead of allowing the p tient to use it. The latter method is much pleasanter to the patient, as well as being more convenient to the physician. Even a slight pressure on a patient's tongue, if made by the physician, will, in a majority of instances, produce retching or contraction of the fauces and an elevation of the soft palate, which thwarts the end aimed by the use of the instrument; but if the patient has the tongue depressor entirely under his own control, there will be no dread or apprehension of any disagreeable sensation being made by the instrument, the muscles of the fauces and velum will be far more likely to remain quiet and passive.

His second chapter is upon the anatomy, physiology and inflammation of the mucous membrane. This, he says, he has compiled from Green's Pathology and Morbid Anatomy. It is presumed that he means Dr. T. Henry Green of London.

In his next chapter he treats of the methods of applying medicines to the mucous membrane. He first speaks of applications to the larynx, recommending the use of the probang, brush or sponge, saying that their application demands a special skill, only obtainable by practice. Further on he says "whether this [passing the probang *into* the larynx] was done by Dr. Horace Green, as claimed by him, has been called in question; certainly in our day no one would hardly dare attempt this manipulation without the use of the laryngeal mirror." Had the author been in the London Throat Hospital during the months of July and August of 1881, he would have seen applications made to the larynx (?) of every throat patient, without the tongue being drawn forward, or its being depressed, and without the aid of the pharyngeal reflector. This was done by an individual who had been connected for years with the institution.

In speaking of applications to the upper pharynx, he considers that the main obstacle to reaching this part with topical agents is the tendency on the part of the muscles to contract on the slightest provocation. To surmount this, he relies on educating the patient to a proper control of the part, failing this, he recommends the method of Dr. Wales of the U. S. Navy. This procedure consists in passing a cord through each nostril to the pharynx, and drawing it out through the mouth, when it is passed over the ear on each side and tied behind the head. That the author thinks well of this method, is proved from the fact that he has invented and illustrated a canula for passing the cord through the nasal passages. He thinks that this should always be resorted to when it will aid to the completeness of the diagnosis, or promote success. No doubt a patient who is seri-

ously alarmed about the condition of his head, may submit to this painful and needless operation for about three times, or at the most five times. After this experience he will have observed a new series of painful symptoms arising from the cutting effect of the cord on the velum; for *no* patient can completely controll the action of the palatial muscles. The author continues, "Open access having thus been obtained to the upper pharynx, applications may be easily made by the probe, brush, sponge or spray." The practitioner who cannot so manage his patient, that the velum will remain pendent. so that even as great, if not greater opportunity will be afforded for making application, than can be done by these two strings, is simply so incompetant, that his attempted treatment is little short of an imposition on the patient.

He continues, "The use of the spray of course requires that the palate should be retracted or relaxed, while the other methods of application are available even if the palate is drawn up, the instrument being crowded through the contracted opening, though of course in this procedure more or less of the fluid is liable to be pressed out and trickle down the pharynx into the larynx." It is well known that it is impossible for the cavity to become completely closed by muscular contraction, without the mucous membrane being formed into folds, this being the case, it is impossible for the physician to apply a remedy to the whole of the surface while the contraction endures, as it would be to wash clean a clenched fist, by thrusting the probang between the closed fingers and the palm of the hand. If such a hand would be opened after such an attempted cleansing, it would be found that there would be streaks that were cleansed and streaks that were untouched, hence, untreated, and this untouched portion would form at least one-half of the whole surface.

In the chapter on taking colds, he gives Rosenthal's and Seitz's theories. He does not quite agree with either of them. This is one of the best chapters in the book. There can be no doubt that the author makes some very good points, points that will stand thorough investigation, and they may yet lead to tht solution of this unsolved mystery. Indeed, upon the proper understanding of this subject will depend the further progress toward a proper treatment of the consequences of taking a cold. It seems impossible at present to form a theory that will fit every circumstance connected with the sometimes active, and sometimes passive manner in which a cold taken. In this same chapter he speaks of the prevention of colds and gives, in little over three pages, all of his suggestions as to the course to be pursued. A little too brief, for so important a subject. He makes a very true and very important suggestion in the treatment of a cold; it is that it should not be allowed to take its own course without treatment. His abortive treatment of cold is good, it consits of copious perspiration brought about by a decoction of hot tea taken at bedtime, this with the addition of

a foot bath, a moderate dose of Dover's powders, and a ten grain dose of quinine, has the desired effect.

In the treatment of chronic catarrhal pharyngitis, after cleansing the parts, he applied a solution of nitrate of silver. Of this agent he says: "We possess no remedy so efficient in chronic inflammation of the pharynx of a purely catarrhal character as nitrate of silver; and yet I know of no remedy that has been misused to such a mischieveous extent as this." He thinks that it should never be applied, in a catarrhal affection, of a greater strength than gr. xx ad ℥j and that even a v gr. or x gr. solution may be found more efficient. Other remedies that he considers valuable are chloride of zinc, sulphate of zinc, tannic acid, etc. He treats a cutefollicular pharyngitis by applying, with a sponge, or a probe wrapped with cotton, a xl gr. solution of nitrate of silver. In chronic follicular pharyngitis, he prefers a v. gr. solution of the bi-chloride of mercury. A little farther along he says that he knows nothing better than the actual cautery for affections that have existed for sometime; occasionally he makes free incision with the knife directly through the follical and cauterises the cut surface with a solid stick of nitrate of silver. It is hard to understand how an inflammation can be reduced by such very irritating processes. He treats croupous pharyngitis by painting the location of the deposit of the membrane with a solution of nitrate of silver, grs. lx to the ℥j. In the treatment of sub-acute tonsilitis he uses chlorate of potash, alum, borax, tannic acid and other astringents. In that of acute follicular tonsilitis, he uses tincture chloride of iron, chlorate of potash and nitrate of silver, the latter in a xx. gr. to a xl. gr. solution.

In a disease that he calls Atrophic or Dry Catarrh, he thinks the best results can be secured by the use of powders. He places sanguinaria at the head of the list of those that he recommends. As this remedy is very powerful in its action, causing a burning pain lasting for a long time, even in ¼ the quantities that he recommends, it is difficult to see how he can expect to reduce inflammaiton by producing so severe an irritation. He speaks of fetid nasal catarrh, and immediately afterwards of ozæna, making two complaints of what is considered by many as one disease. For chronic catarrhal laryngitis he applies, by means of a cotton pellet, a solution of nitrate of silver from gr. iij ad xv to the ℥j. In chronic catarrhal laryngitis of syphilis he uses of the bi-chloride of mercury in a ij gr. solution, or a v gr. to a x gr. solution of chloride of zinc; or a v gr. to a xv. gr. solution of nitrate of silver.

In hypertrophic nasal catarrh, he uses sulphate of zinc and nitrate of silver from gr. j ad. grs. ii. to the ℥j water; he says that these solutions should be in such strength that they will cause no pain or irritation. This last condition would certainly reduce his weakest solution of silver to ¼ of the strength what he recommends.

The questions may be asked, has he given us anything new in his mode of using nitrate of silver? Has not the great majority of authors, since the greatly abused Horace Green, recommended its use just as he has? Have they not stated that its successful employment was dependent upon as many conditions as he has named? And, has not almost every physician in the land, since Horace Green's time, been disappointed with the effects of its application? Not only is this disappointment due to the remedy itself but also to the method taken to apply it. The *sponge-probang* or the *brush* is an imperfect means of applying either a liquid or a powder. For instance, if a circumscribed spot in the pharyngo-nasal cavity or in the larynx is to be touched, it cannot be done without touching other parts also, because either passage, in its spasmodic closure, will instantly grasp the instrument and in this way apply the remaining medicated liquid or powder to every portion of the presenting folds. If the application is made so quickly that the instrument is taken out of the mouth before the contracting passage can grasp it, then a portion of the powder or liquid that was placed on the inflamed or ulcerated spot, will be applied to the healthy part of the membrane that comes in contact with this spot, during the closure of the passage caused by the contraction. In this way a healthy portion of the mucous membrane, that is pressed against the spot touched by the instrument, will receive an application of a remedy that it does not require, and which will be certain to injure it.

If the whole surface is to be treated, this also will be incompletely accomplished for the reason that as soon as the patient feels the contact of the instrument, instantaneous contraction of all the muscles surrounding either passage will ensue, thus completely closing it. This spasmodic closure will be only partially relaxed, while the patient is making expulsive efforts to eject the instrument or the medicament by retching or coughing or both combined. It is evident, under these circumstances, that it is only those parts of the mucous membrane that form the projecting folds, on closure of the fauces, which receive the force and application from the instrument. One might as well expect to wash the hand clean, by forcing a probang between the fingers and the palm when the hand is tightly closed. In this instance, and in that of the throat, the presenting ridges only are cleansed, leaving those portions of the surface that formed the creases between the folds, untouched, hence uncleansed, and those untouched portions, form at least one-half if not two thirds of the entire surface.

He greatly favors the Weber Nasal Douche, and thinks that it may be used with decided benefit. "We have every reason to suppose the entire diseased membrane is reached by remedies applied in this manner."

"Every reason," means that he has made the experiment on the cadaver, and *saw* that the entire diseased membrane was reached

by this means. Has he made this experiment? He does not say so! It means also that at least one-half of the patients that employ the Weber douche, have remedies applied to the entire diseased membranes of their nasal cavitses and are cured thereby, and, that he knows this by actual experiment and inspection on at least a dozen patients. Has he made this experiment and inspection? He does not say so! Experiments of this kind have been made a great many times, and they proved that neither he or any one else have *one reason* to suppose that this kind of a douche reaches the entire diseased surface. Positive assertions unsupported by facts, are grieveous faults in an author.

Dr. Jarvis' wire snare ecraseur is prominently brought forward. It deserves favorable mention by every author on this subject.

He has grouped together, in a tabulated form, four diseases of the larynx that to some extent, resemble each other. This is a very good method of studying the four distinct diseases named. They are: Superficial ulcers of syphilis; deep ulcers of syphilis; laryngeal phthisis and carcinoma of the larynx.

In the chapter on Tumors of the Larynx, he has quite a number of old familiar illustrations of instruments, some of which have been in our books on throat diseases for a score of years; several of the forceps could not be made to reach nearer than a half of an inch of the vocal cords, even after long education of the patient to tolerate instruments in the throat.

He treats tracheotomy very fully. In this chapter we see the illustration of an instrument, that on page 387, is called LaBorde's tracheal dilator, and the very same instrument is illustrated on page 24, and is called Elsberg's nasal speculum. His last chapter contains the very short, but valuable history of 23 cases of exterpation of the larynx. He completes his book with an apendix containing the formulæ of cleansing, astringent, stimulating, sanative, altertive and disinfecting solutions; in the same place he speaks of snuffs, powders, inhalations and cough mixtures.

We are sorry to say, at the close of this lengthy review, that taking into consideration the opportunities of the author, he has not introduced more original matter. Were it not that he speaks more fully and deffinitely on diseases of the nose than has formerly been done by a majority authors preceding him, his book would be but little more than a compilation.

THOS. F. RUMBOLD.

Books and Pamphlets Received.

ARTICLE XVI.

Anatomical Studies upon Brains of Criminals. A Contribution to Anthropology, Medicine, Jurisprudence and Psychology. By Moriz Benedikt. Translated from the German. By E. S. Fowler, M. D., 8vo. pp., 185. (New York: Wm. Wood & Co., 1881. St. Louis: St. Louis Book & News Co.)

Coulson on the Diseases of the Bladder and Prostate Gland. Sixth Edition Revised by Walter I. Coulson, F. R. C. S. 8vo., pp., 393. (New York: William Wood & Co., 1881. St. Louis: St. Louis Book & News Co). July No. Wood's Library of Standard Medical Authors.

A Treatise on Food and Dietetics, Physiologically and Therapeutically Considered. By F. W. Pavy, M. D., F. R. S. Second Edition, 8vo. pp. 402. (New York: William Wood & Co., 1881. St. Louis: St. Louis Book & News Co.) Oct. No. Wood's Library of Standard Medical Authors.

Supplement to Ziemssen's Cyclopædia of the Practice of Medicine. Edited by George L. Peabody, M. D. 8vo. pp. 844. (New York: William Wood & Co. 1881. St. Louis: St. Louis Book & News Co.)

Transactions of the Michigan State Medical Society for the Year 1881. No. 1, Vol. VIII. 8vo. pp. 107. (Lansing: 1881).

Annual Address delivered before the American Academy of Medicine, at New York, Sept. 20, 1881. By Edward T. Caswell, A. M., M. D. Published by order of the Academy.

Pasteur and Jenner. An Example and a Warning. By J. J. Garth Williamson. Through Dr. C. Spinzig.

A new Gynæcological Table. By W. A. B. Sellman, M. D.

A Handbook of Uterine Therapeutics and of Diseases of Women. By Edward John Tilt, M. D. Fourth Edition. 8 vo. pp. 328. (New York: William Wood & Co. 1881; St. Louis: St. Louis Book & News Co.) Nov. No. of Wood's Libray of Standard Medical Authors.

Primary Epithelioma of Larynx below Vocal Cords.—Unique Case.—Bilateral Paralysis of Laryngeal Abductors.—Death. By D. Bryson Delevan, M. D. Reprint.

Insanity in Relation to Law, with some Reflections on the Case of Guiteau. By C. H. Hughes, M. D. (Reprint from the *Medical and Surgical Reporter*, Nov. 26, 1881.)

The Nurse and Mother. A manual for the guidance of monthly nurses and mothers. Comprising instructions in regards to pregnancy and preparation for child-brith, with minute directions as to care during confinement, and for the management and feeding of infants. By Walter Coles, M. D, 8vo. p p. 158. (St. Louis: J. H. Chambers & Co. 1882.)

A Treatise on the Diseases of Infancy and Childhood. By J. Lewis Smith, M. D. Fifth Edition thoroughly revised, with illustrations. 8vo. p p. 836.(Phila. H. C. Lea's son & Co. 1881. St. Louis: Hugh R. Hildreth Printing Co.)

Essentials of the Principles and Practice of Medicine. A Hand-book for Students and Practitioners. By Henry Hartshorne, A. M., M. D. Fifth Edition, thoroughly revised and improved with 144 illustrations. 12 m o. p p. 609.(Phila: Henry C. Lea's son & Co. 1881. St Louis: Hugh R. Hildreth Printing Co.)

The Science and Art of Midwifery, By William Thompson Lusk, A. M., M. D. with numerous illustrations. 8vo. p p. 687. (New York: D. Appleton & Co. 1882. St. Louis Hugh R. Hildreth Printing Co.)

A Text-Book of Physiology. By M. Foster, A. M., M. D., F. R. S. Second American from the Third and Revised English Edition. With Extensive Notes and Additions By Edward T. Reichert M. D. with 259 illustrations. 12 mo. p p. 698 (Phila. Henry C. Lea's son & Co. 1881. St Louis: Hugh R. Hildreth Printing Co.,)

The Therapeutics of Gynæcology and Obstetrics; comprisiny the Medical, Dietetic and Hygiedic Treatment of Diseases of Women. Second edition, thoroughly rovised and enlarged. Edited by Wm. B. Atkinson, A. M., M. D. 8vo. pp. 671. (Phila.: D. G. Brinton, 1881. St. Louis. Hugh C. Hildreth Printing Co.)

News Items.

Article XVII.

Ophthalmology: Middlemore Fund Prize Essay.—The interest on the fund of £500 given in trust to the British Medical Association by Mr. Richard Middlemore, of Birmingham, to found a prize for the best essay on Ophthalmology, having accumulated for three years, the Committee of Council now offer, in accordance with the terms of the trust deed, a prize of £50 for the best essay on the Scientific and Practical Value of Improvements in Ophthalmology Medicine and Surgery made or published during the past three years. The successful essay will be the property of the Association. Essays must be in English or accompanied by an English translation, and forwarded under cover, with a sealed envelope bearing the motto of the essay, and containing the name and address of the author, addressed to the General Secretary of the British Medical Association, 161 A, Strand, London, and must be in his hands on or before May 31st, 1882. —*British Medical Journal.*

The Australasian Medical Gazette, No. 1. Vol. 1., has just arrived, and it is with pleasure that we place it upon our exchange list. It is a monthly publication of 16 pages, published by L. Bruck of Sydney, New South Wales. It is well printed and edited, and gotten up in the style of the *British Medical Journal* We wish it all the success it can achieve at the antipodes.

Prof. L. Elsberg.—The Trustees of Dartmouth College have elected Dr. Louis Elsberg of New York, Professor of laryngology and diseases of the throat in the Dartmouth Medical College. Dr. Elsberg has resigned the professorship which he has heretofore held in the medical department of the University of the city of New York. We congratulate Dartmouth College on the acquisition it has made in securing the services of Dr, Elsberg, as one of its faculty.

FOREIGN BODIES IN BLADDER.—A published list of foreign bodies introduced into the bladder (of both sexes) includes the following: 78 portions of catheters and lithotrites, 82 needles, pins, or tags, 7 bone or ivory needles, 6 ear-picks, 3 ivory whistles, 1 ivory spindle, 1 ivory stilletto handle, 15 leaden balls, 3 small keys, 8 metallic fragments of various kinds, 12 bones or splinters of bone, 12 pieces of pebble or china, 6 pen-holders 15 needle-cases, 12 pieces of tobacco pipes, 4 pieces of glass tubing, etc.—[*Md. Med. Jour.*

DR. DAVID FOULIS.—One of the most brilliant young surgeons of Scotland, recently fell a martyr to his duty. This was Dr. David Foulis of Glasgow. It was chiefly as a specialist in diseases of the throat that Dr. Foulis had made his mark. He achieved a European reputation by his performance of the operation of extirpation of the larynx, an operation which he had repeated with equal success. Recently he had occasion to perform tracheotomy in two cases of virulent diphtheria; from these cases he caught the disease, and died after a few days' illness. —[*Med. and Surg. Reporter.*

COHN ON THE EYES OF MEDICAL STUDENTS.—Dr Cohn(*Med. Jahrb, d. K. K. Gesell. d. Aerzte z. Wien.*, 1881) says that fourteen years ago he found that 53 per cent. of the Catholic theological students, 55 per cent. of the law students, 56 per cent. of the medical students, 67 per cent. of the Evangelical divinity students, and 68 per cent. of the philosophical students, were myopic. In the summer of 1880, 59 per cent. of the medical students, were myopic, 55 per cent. of the junior or non-clinical students, and 64 per cent. of the advanced or clinical, the longer studies of the latter being probably the cause of the higher percentage. In discussing the cause, Cohn says that the blame lies entirely in the methods of study. The lecture-halls are badly lighted, the benches and desks so arranged as to make writing most uncomfortable and difficult, the type of the text-books is too small, and the lines too long (straining accommodation when the eye passes from the ends to the middle), as well as too closely printed. He recommends that the light should fall fully on every spot in the hall; that the benches should be 45 centimètres (17.7 inches) high, and 40 centimètres (15.8 inches) broad, while the desk should be 70–75 centimètres(about 29.5 inches)high, and 35 centimèeres (13.8 inches)broad, to allow of easy writing. The type,

he says ,should be 1.5 millimètres (.06 inch) in size—of small *n* for example—and 0.25 millimètres(.01 inch) in thickness of line; the intervals between the lines should be at least 2.5 millimètres (.1 inch) and the tho lines should not exceed 100 millimètres (about 4 inches) from one side of the page to the other.—[*London Med. Record.*

CONCEPTION WITHOUT INTRODUCTION OF THE PENIS.—Dr. A Lippel relates the case of a primipara to whom he was called who, it was stated, would not be delivered on account of a closure of the genitalia. Where the doctor expected to find a narrow passage, he found that at the acme of the pains the head descended to the labia where it was covered by a very tense membrane as by a bonnet. The waters had been gradually flowing away. A minute examination revealed in the center of the membrane an opening through which nothing larger than a pencil could be passed. A crucial incision was made from this as a center and in a minute thereafter a living child was born.

The case was one of a very firm hymen with an opening so small as to preclude the possibility of the entrance of the penis. The husband believed that the latter was entirely unnecessary, and was astonished when informed that coitus should be accomplished in another manner.—*Deutsche Mewizine Zeit.—Lancet and Clinic.*

Having assumed Editorial charge of the *Journal of Mental and Nervous Diseases*, previously edited by Drs. Jewell and Banister, of Chicago, I request that all exchanges be hereafter addressed to G. P. Putnam's Sons, 27 and 29 West 23d Street, New York.

WILLIAM J. MORTON, M. D.

This leaves the *Alienist and Neuralogist*, the only periodical on nervous and mental diseases, published in the West. It is needless to say that we are advocates of Western physicians reading Western medical journals. Dr. Hughes' ability and enterprise have done much to bring about this change.

DR. J. MARION SIMS, we regret to learn, has deemed it prudent, for his health's sake, at the suggestion of his physician, Dr. Alfred L. Loomis, of New York, to return to Europe for the coming winter. He will remain in the southern portion of France for the time being; but those who may wish to correspond with him can do so by letters addressed to him to No. 12,

Place Vendôme, Paris, France. From a personal letter received from him only a few days ago, we rejoice to be able to state that his health has greatly improved, and that, with present indications, he will be able to resume active practice at his home in New York next spring. Let it be the prayer of all who recognize and appreciate genius and goodness of heart, that this great leader in the profession, may be fully restored to the full vigor of health. While not authorized to say as much, we are informed from another quarter, that the publication of his book has been prevented by his feeble health. If the profession should lose this publication, it would suffer an irreparable loss.—[*Va. Med. Monthly.*

Died, at his residence near Dublin, on Oct. 21, ALFRED MCCLINTOCK, M. D., LL. D., F. R. C. S. I., who is well known in this country as the author of "Clinical Memoirs on the Diseases of Women," and the editor of Snellie's Midwifery for the New Sydenham Society.

Also, at Paris, October 27, Professor JEAN BAPTISTE BOUILLAUD. Born in 1795, Bouillaud was a young and earnest student when the discovery of auscultation by Laennec gave him the means of making the discovery which will always be connected with his name—the relationship between rheumatism and cardiac disease. He was the author of the word *endocarditis*, and gave an excellent description of the anatomical changes which accompany that disease. In 1831, he obtained, by open competition, the chair of Clinical Medicine at La Charité, where he was an ardent teacher of the doctrine of Broussais, that all diseases were inflammations, and required treatment by bleeding. In 1832, he was returned to the Assembly by his native town, Angoulême, and after the revolution of '48, he was promoted to the post of Dean of the Faculty. He was a member of the Institute and of the Academy of Sciences.—[*Medical News.*

NIGHT-CALLS.—The *New York Medical Record* mentions that a physician is suing, at Shelbyville, Ind., for a divorce from his wife on the ground of cruel and inhuman treatment. Having a large practice, he is often called out at night. His wife, being jealous, refused to believe that all his absences from home were professional, and demanded that he should stay in of nights. He said that his patients would not stand neglect. Then she

adopted the plan of taking poison whenever he had a night-call, thus compelling him to remain and doctor her. She swallowed a deadly drug in this way several times, and her life was saved with difficulty. The husband claims that such conduct is a just cause for divorce.—[*Lonisville Med. News.*

DR. BEN J. BALDWIN has been elected House Surgeon to the Manhattan Eye and Ear Hospital in New York. His abilities and his experience in the general practice of medicine peculiarly fit him for the study of ophthalmology.—[*Medical Herald.*

A TOM CAT STYPTIC is the term applied by some journalist to the following treatment: A woman on a southern plantation was bleeding to death from the nose. The doctor had no ordinary expedient, but seeing a cat in the house, he had its head chopped off. Then he secured a section of the intestine, cleaned it, tied one end and thrust it through the nostril, and lastly distended the gut by injecting water, and tied it near the nose. The bleeding was immediately stopped.—[*Pacific Med. and Surg. Journal.*

A FERTILE MULE.—A great zoological rarity is now on view at the Jardin d'Acclimatation, Paris. It is an African female mule, named Catherine. In 1874, this animal, together with a Barbary stallion, Caïd, and their offspring, Constantine, were about to be sent to the Vienna Exhibition, when they were all three purchased for the Gardens in Paris. Since then, Catherine has given birth to an offspring (Hippone), by a horse, in 1874; to two others (Salem and Othman), the sire being an ass, in 1875 and 1878; and quite recently, she has produced a fifth (Kroumir), the issue of the same horse as her first two offsprings. It is very interesting to compare together the members of this family, unique in origin. The fact of the mule being fertile positively disproves the Arab proverb: *N'har t'ouled el brain entsa oul redjet oulo entsa*: "When the mule produces offspring, women will become men, and men will become women." Salem and Othman are regularly used for the cars on the miniature tramway which unites Port Maillot to the Garden of Acclimatation. —[*Lancet and Clinic.*

TREATMENT OF ECZEMA BY MUSLIN IMBUED WITH OINTMENT.—Unna (Berl. Klin. Woch. No. 35, 1880) recommends a new method of applying ointments. Unstarched muslin is

soaked in the melted ointment, by which it becomes saturated. When dry, it is cut into pieces, as required, and when applied, it is kept in position by a bandage.—[*London Med. Record.*

According to Dr. Foot, of Dublin, there is nothing more than a little dexterity required to pass a catheter (say 10) into the larynx, a treatment which is now meeting with favor in œdema glottidis and croup.—[*Md. Med. Jour.*

LONGEVITY IN EUROPE.—M. De Solaville analyzes in the *Revue Scientifique* the results of recent European census by ages, and the register of deaths also by ages. If we strike a mean of the census from 1869 to 1872, we find that Europe (exclusive of Russia, Turkey, and some small Southern states) possessed in 1870 a mean population of 242, 940, 376, classed as follows from the point of view of advanced ages: 17, 313, 715 of more than 60 years; 79, 859 of more than 90; and 3, 108 of more than 100 years, *i. e.*, 1 inhabitant in 12 of more than 60, 1 in 2,669 of more than 90, and 1 in 62, 503 of more than 100. Women, M. Solaville finds, are more numerous in the extreme old age than men, and the difference increases with age. Thus at 60 years the advantage is with the women in the proportion of 7 per cent., at 90 and above it rises to 45, and with centenarians to 60 per 100. It is in France that we find the greatest relative number of inhabitants at the age of 60 and upwards; but it is not so for centenarians, of which France has less than all other states of Europe except Belgium, Denmark and Switzerland. From a calculation of deaths, by ages, the result is reached that to the total deaths, those at the age of 90 and upwards bore the following proportions to the countries named, and arranged according to the decreasing order of importance: Great Britain 9. 73; Sweden, 7. 39; France, 6. 58; Belgium, 6. 07; Switzerland, 6. 00; Holland, 4. 47; Italy, 3. 76; Bavaria, 3. 42; Prussia, 3. 06; Austria, 2. 69. The result is in accordance with that we know of the mean age of the deceased in the same countries.—[*Oil and Drug News.*

A CENTENARIAN.—A writer in the Lancet reports that a man named Micheal Morgan, born in Alerkhill, has reached the advanced age of one hundred and seven years. He remembers well the battle of Ballinahinct which was fought in 1798. He follows the profession of mendicant, and walks three miles every

Saturday on a begging expedition. His sight and hearing are good considering his age. His memory is also good, but is soon tired out by any attempts to cross-examine him in verifying his history. He walks half bent and suffers from general muscular tremor; dut the fact that he can take long walks and expose himself to the most severe weather without discomfort is evidence of a remarkable preservation of physical power.

QUININE INUNCTION.—According to Dr. Jules Simon (*Gaz. des. Hôp.*), when quinine is used externally. in the form of an ointment with equal parts of lard, it is not discovered in the urine until after the third day in children above two years of age, and somewhat earlier in those who are younger.—[*Louisville Med. News.*

We have received the initial number of the *Detroit Clinic*, a weekly of sixteen pages. Edited by Dr. H. O. Walker and O. W. Owen, together with Drs. Theo. A. McGraw, E. L. Shurley, N. W. Webber and T. N. Reynolds. The subscription price is one dollar per annum, and the publisher, Geo. S. Davis of Detroit. The objects of this new venture are among other things to furnish clinical articles and to "establish medical education on a higher basis." We hope that the publication may be successful in its aim, aud not lack moral and financial support.

THE FIRST POST-MORTEM IN AMERICA.—The earliest recorded examination, made in 1670, is mentioned in a manuscript order of the Council of Lord Baltimore.

THE FILARIA A NOCTURNAL PARASITE.—It has lately been discovered that this curious parasite during the day disappears from the blood, to re-appear at night.

AMERICAN PUBLIC HEALTH ASSOCIATION.—The ninth annual session of the American Public Health Association was held November 29th., at Savannah, Ga. There was a large atten dance. The meeting was called to order by the President, Dr. Charles B. White. The following papers were read at the morning session: "The Contagious Diseases of Domestic Animals," by Dr. Ezra M. Hunt, of New Jersey; "Disease Among Texas Cattle," a continuation of the report made to the associa-

tion at the New Orleans meeting, December 1880, by Dr. J. R. Smith, United States Army; "A Report of the Examination of Hogs at the New Orleans Abattoir during the summer of 1881," by the New Orleans Sanitary Auxiliary Association; "Trichina Syiralis," by Dr. J. M. Partridge, of Indiana; "Trichina Spiralis in American and German Hogs," by Dr. F. S. Billings, veterinary surgeon, of Massachusetts. At the afternoon session, the following were read: "The Kankakee, a Sanitary Problem in Indiana," by Prof. J. L. Campbell, of Indiana; "The Comparative Vital Movements of the White and Colored Races in the United States," Dr. S. S. Herrick, of Louisiana; "The Disposal of the Dead," Dr. W. H. Curtiss, of Illinois; "The Relation of Alimentation to Infantile Development and Diseases," Dr. T. C. Duncan, of Illinois. In the evening a public reception was given at the Temple. The meeting was presided over by the Mayor. An address of welcome was delivered on the part of the city authorities, by the Hon. George A. Mercer, and on behalf of the Georgia Medical Society of Savannah, by Dr. R. J. Nunn. President White read his annual address. The association was afterward entertained at the residence of Dr. L. A. Tallegant.—[*Med. Record.*

Dr. Theophilus Parvin is to be appointed to the chair of obstetrics and medical and surgical diseases of women in Louisville University.

The intelligent compositor made Dr. Spinzig say *chronology* for *chorology* in lines 4 and 25, page 614 of Vol. XLI of the JOURNAL; but accidents will happen sometimes.

FOR SALE.—Medical and surgical books and instruments. My entire outfit will be sold very cheap. Reason for selling, rapidly failing health. A rare chance for a young physician. The vacancy made in practice by my illness is fully occupied.

For further particular write to

E. L. SHACKELTON, M. D.
Auburn, Placer Co., California.

The Madison County Medical Society will have its next meeting on the last Tuesday in January 1882, in the Masonic Hall in Alton, Ills., exercises to commence at 10 A. M. A cordial invitation is extended to visiting brethern.

S. E. BUCKNELL, Sec'ty.

IT is a well-known fact that many physicians after graduating in the west go to the eastern cities and also to the continent for the purpose of obtaining a more practical and thorough education than that given in the ordinary medical colleges. Some of the faculty of the Missouri Medical College and a few specialists of the city have formed a school for physicians only, where clinical experience in all the various branches of medicine and surgery will be given. Free use will be made of the manikin and of the cadaver in this course, which will commence on February 20, and continue six weeks.

G. P. Putnams's Sons announce for early publication the following works:

A treatise on the Science and Practice of Medicine. By Dr. A. B. Palmer, Professor of practice of medicine in the University of Michigan.

Clinical Studies of Diseases of Children. By Mary Putnam Jacobi, M. D.

The Student's Manual of Diseases of the Skin. By L. D. Bulkley, M. D.

The Student's Manual of Diseases of the Nerves. By E. C. Seguin, M. D.

Aids to Diagnosis. Part III.—What to ask. By J. Milner Fothergill, M. D., M. R. C. P.

Sensation and Pain. By Dr. C. Fayette Taylor. 16mo. cloth.

Suicide. Studies on its Philosophy, Causes and Prevention. By James J. O'Dea, M. D. 12mo, cloth.

The Thirteenth Annual Meeting of the Iowa State Medical Society will take place at Des Moines, Iowa, Jan. 25, 26 and 27, 1882, and a very interesting time is promised to all who may attend. The meeting will be one of general interest, owing to the papers that will be read and to the standing of their authors in the profession. A large, cheerful and commodious hall will be provided for the meetings.

T. J. Caldwell the president, of Odel, will make the Annual Address, and the following papers are promised:

1.—Are the Poor Houses of Iowa proper places for the Care of the Incurable Insane?—M. H. Walpes, M. D., Dubuque.

2.—The Plea of Insanity.—A. Reynolds, M. D., Clinton.

3.—Primary Indications of Insanity.—Mark Ranney, M. D., Mt. Pleasant.

4.—The Duty of the State to her Feeble-Minded Children.—O. W. Archbald, M. D., Glenwood.

5.—Pyelitis occurring during the Puerperal State.—L. C. Swift. M. D., Des Moines.

6.—The Diseases Incident to Military Prisons, and the Influences by which they are Modified.—Wm. Watson, M. D., Dubuque.

7.—Operative Procedures in Corneal Lesions.—C. M. Hobby, M. D., Iowa City.

8.—Medical Ethics and Medical Advertising.—H. C. Bulis, M. D., Decorah.

9.—Life; what is it?—J. B. Gorrell, M. D., Newton.

10.—Hæmorrhagic Diathesis.—B. F. Kierulff, M. D., Marshalltown.

11.—The Disappointments of Country Physicians in the Practice of Gynecology.—J. Williamson, M. D., Ottumwa.

12.—Inversion of the Uterus—a Case.—J. A. Blanchard, M. D., Des Moines.

13.—Microscopy.—J. J. M. Angear, M. D., Ft. Madison.

14.—Gun-shot Wound—a Case.—J. W. Gustine, M. D., Carroll.

15.—Antiseptic Surgery.—R. A. Patchen, M. D., Des Moines.

16.—Sanitary Matters.—R. J. Farquharson, M. D., Des Moines.

17.—Management of the Newly-born Child.—G. W. Beggs, M. D., Sioux City.

18.—Local Treatment of the Mucous Membrane of the Air Passages.—E. H. Hazen, M. D., Davenport.

19.—Report on Necrology.—A. W. McClure, M. D., Mt. Pleasant, (Chairman.)

Any member having any case of special interest to the profession is cordially invited to present it.

METEOROLOGICAL OBSERVATIONS.

By A. WISLIZENUS, M. D.

The following observations of daily temperature in St. Louis are made with a MAXIMUM and MINIMUM thermometer (of Green, N. Y.). The daily minimum occurs generally in night, the maximum at p. m. The monthly mean of the daily minima and maxima added and divided by two, gives quite a reliable mean of the monthly temperature.

THERMOMETER, FAHRENHEIT—NOV., 1881.

Day of Month.	Minimum.	Maximum.	Day of Month	Minimum.	Maximum.
1	47.0	69 5	18	35.5	38.5
2	49 0	49.0	19	26.0	29.0
3	36.0	48.0	20	21.0	33.0
4	38.5	64.0	21		
5	48.0	61 0	22	33.5	36.0
6	42.5	65.5	23	30.	35.0
7	50.5	61.5	24	16,5	26.0
8	47.0	54 0	25	20.0	40.5
9	38 5	52.0	26	35.0	47.0
10	40.5	43.5	27	36.5	55.0
11	49.5	50.5	28	36.5	60 0
12	40 0	49 0	29	47.0	63.0
13	38.	60.5	30	51.5'	64.5
14	37.5	54.0	31		
15	27.0	43 0			
16	37.5	62.5	Means	36.7	49.5
17	55.0	63.5	Monthly Mean.	43.0	

Quantity of rain, 5 33 inches.

MORTALITY REPORT.---CITY OF ST. LOUIS.

FROM OCT., 9 , 1881, TO OCT., 29, 1881, INCLUSIVE.

Small Pox..... 1	Childbirth..... 3	Convulsions & Trismus Neonatorum 36	Syphilis..... 0
Scarlatina..... 10	Inanition, Want of Breast Milk, etc 13	Hydrocephalus and Tub. Meningitis. 2	Apoplexy..... 10
Pyæmia & Septicæ 1	Alcoholism.. 6	Meningitis & Encephalitis 20	Dis. fem. gen. org. 1
Erysipelas 1	Rheumat'm & Gout 2	Other Diseases of the Brain and Nervous System 12	Surgical Operation 0
Diphtheria 18	Cancer and Malignant Tumor.. 12	Cirrhosis of Liver and Hepatitis.. 16	Premature Birth 0
Membran's Croup. 10	Phthisis & Tuberculosis, Pulmon 67	Enteritis, Gastro-Enteritis, Peritonit, and Gastritis' 22	Deaths by Suicide 11
Whooping Cough. 3	Bronchitis. 9	Bright's Disease and Nephritis. 6	Deaths by Accid'l 2
Ovarian tumor.... 0	Senility 17	Other Diseases of Urinary Organs. 0	Deaths by Homicid 4
Measles 0	Pneumonia 15	Diabetes 0	Congen Debor'ty 31
Typhoid Fever .. 25	Heart Diseases 22		Total Deaths from all Causes 626
Cerebro Spinal Fev 1	Other Diseases of Respir'y Organs 15		Total Zymotic Diseases 199
Remittent, Intermittent, Typho-Malarial, Congestive & Simple Contin'd Fevers, 40	Heat Stroke 0		Total Constitutional Diseases. 145
Puerperal Fevers.. 4	Marasmus—Tabes Mesenterica and Scrofula . ..57		Total Local Diseases 191
Diarrhœal Disea's 64	Other Const. Dis 5		Total Develop'tal Diseases 51
Other Zymotic Diseases 2			Deaths by Viol'ce 40

CHAS. W. FRANCIS, *Health Commissioner.*

Vol: XLII. FEBRUARY, 1882. No. 2.

Original Contributions.

Article XIX.

Nervous Shock as a Therapeutical Agent. By Romaine J. Curtiss, M. D., of Joliet, Ills.

It may be true, scientifically, that all remedies addressed to the nervous system, as drugs and the galvanic current, act by producing a shock upon the nerve centers to a greater or less extent, and that the beneficial effect of these remedies may be independent of the cause of the disease. It is established that pain may continue in a nerve or set of nerves from habit after the cause which originally produced the disease has been removed and that the pain under these conditions may be removed by galvanism, which may be classed as a mild degree of shock. No verification is longer necessary to establish the fact that shock of the nervous system, from injury of the sensory nerves, or through the higher nerve centres from emotional excitement, is a factor of the greatest importance in the etiology of nervous diseases. Shock kills a large proportion of wounded persons who die from injuries, and the history of mental development is filled with instances of endemic and epidemic nervous diseases of the convulsive type which were the sequences of superstitious and religous emotional excitement. Death, idiocy, insanity and convulsions it is well known, result from the terrible shock the nervous system sometimes receives through the avenues to the brain, of fear or other emotions.

The importance of shock as a cause of nervous disease is granted, and it is easy from these data to infer that such phenomena, properly modified, and used as remedies have a very beneficial effect upon nervous diseases. The general induction I wish to make from citations of the following cases is: that nervous shock by drugs, electricity, etc., sometimes cures nervous diseases without reference to action on the cause of the disease, and that this law holds good in many methods of treatment now employed in the management of nervous diseases which are supposed to be addressed to the cause of the disease. I believe that

this view of certain nervous diseases, the cause of which is referred to the sexual organs, and the cure of which is referred to the surgical operations of circumcision and dilatation of the urethra, can be explained with greater satisfaction in this way, than by the induction attempted, and so violently disputed, that the nervous diseases in question are caused by preputial irritation and contracted meatus and the surgery of circumcision and dilatation removes the cause. In the cases of this nature already reported it must be conceded that the supposition given that the nervous disease—generally paralysis—is a sequence of the genital irritation is not verified, and if proofs cannot be furnished, it is probable that the cure, or apparent cure of the nervous disease, is due to the nervous shock of the operation acting independently of the cause of the disease.

In support of this view, relating to this open question, I will cite cases and discussions from medical authors as well as cases from my own practice.

CASE I.—Mrs. —— in 1879 when she became my patient, was thirty-two years of age. She had been divorced about four years, and while living with her husband six years, had one child and three miscarriages. The clinical history showed since her divorce she had been continuously in the care of physicians for symptoms referred to the pelvic organs. The first year she was subject to weekly applications to the uterus by an eminent gynæcologist of Chicago, for ulceration. I had reason to believe that the diagnosis was correct, that the remedy used was nitrate of silver, and that the ulceration was cured, though the patient declared she was not benefitted in the least.

The patient next consulted a medical gentleman who owns a homœopathic sign board, formerly a regular, and who advertises that he "doctors both ways," yet his treatment of this patient was neither way, as he subjected her to the operation for restoration of a perineum which was never lost; for the most critical examination by myself and another physician failed to find any evidence of perineal rupture or cicatrix of operation, except two round cicatricial warts in the skin, one on each side and just posterior to the vulva, which were probably made by inserting a wire, drawing the vulva together, and leaving things in *situ*, as the patient said, for two weeks.

I am convinced, from my own examination and opinion of

the physician who examined the case with me, as well as the statement of the patient herself, who, when questioned, said she could perceive no change in the anatomy of the parts, that the patient never had any degree of perineal rupture, and I concluded that the accomplished physician who made the operation, did so with the intelligent design of producing a nervous shock on the patient. The effect was good, as a therapeutical measure, for the patient declared that her subjective sensations of distress were removed, though they were not the symptoms belonging to a rupture of the perineum, and that for several months afterwards she thought herself cured.

However, when the patient consulted me, she was as "bad as ever." Her symptoms were: A burning pain in the pelvis, extending to the hips, and up the spine and abdomen, some rectal tenesmus, or rather as she described, a feeling of something pressing upon the rectum. This distress was not constant, but described a rhythm of about three weeks duration. During the paroxysmal periods, or when the pain was on, the abdomen would become greatly distended, and in addition to the burning pain and tenesmus, there would be a throbbing sensation throughout the pelvis. An examination of the uterus bimanually showed a depth of three and a quarter inches. There was no marked tenderness of the uterus or ovaries, nor visible discharge from the uterus. This was the condition when the pain was off. During the paroxysm there was general hyperæsthesia of vulva, vagina, uterus and ovaries and abdomen, and pressure in direction of cellular regions of the pelvis gave her great pain. At this time, also, blood vessels apparently enlarged, could be felt pulsating notably behind the uterus.

About this time I read a description, I think in Emmet's work, of a case somewhat similar in which a gentle elevation of the uterus would stop the pulsation, and the case was cured by a pessary, which held the uterus in just the right position. I now thought I had the key to the situation, and used temporarily a cotton pessary with very happy effect. I followed this up by the trial of nearly all pessaries of all sizes. When the patient had no pain or hyperæthesia she was contented with any pessary; but on accession of her paroxysm, any pessary had to be removed, and I finally gave up this view of the case, also, the pessaries. I then thought the disease might be due to the effects of malaria, and gave large quantities of quinine, also applying

quinine locally to the uterus, and gave rectal injections of twenty-five grains at a dose. For a few months this method promised a cure, but finally had to be given up. I noticed at this time a theory put out by a Baltimore physician which was, in substance, that most uterine diseases, if not all, were caused by a condition of venous congestion of the uterus by obstruction of the circulation due to stricture of the cervix, and that dilation of the cervical canal by bougies was the sovereign "balm in Gilead" for suffering woman. I thoroughly dilated the cervical canal by bougies, and other dilators without effect of permanent character. The next new light on uterine disease which attracted my attention, was a statement in some journal, that many obscure diseases of this nature were due to endometritis and the diagnosis could be made by applying a cotton tampon saturated with a solution of tannin over the cervix and examining the discharge collected with the microscope when, if endometritis was present, pus cells would be seen. I tried the method and on examining the discharge with Talles very best microscope, sure enough the pus cells were there. I now proceeded to treat the endometritis with comp. tr. Iodine, as recommended. I made all applications to the uterine cavity by means of a syringe having a long, slender, flexible nozzle, the distal inch of which is perforated with five holes, and which I wrap with cotton, and which combines syringe and swab. The applications were always more or less painful and were made every fifth day for about two months. At this time, for the first time since using this instrument, the cotton on one occasion became displaced in passing the cervical canal, some of the holes were uncovered, and I met with the calamity of producing a terrific uterine colic in my patient by injecting a drachm of the medicine into the uterine cavity. I need not describe the scene which followed, and which lasted for two hours, the patient refusing to take morphia. It is sufficient to say, that the patient received a nervous shock, the first since the homœopathic restoration of her perineum, and the second of the series.

After the accident the patient was free from her pain, tympanites and tenesmus for several months. But had during this time an attack of sciatica, and short session of *tic douloureaux*. At the end of about six months she returned and stated the feeling of pressure on the rectum had returned, though she had no further burning pain in back and abdomen, and her bloating from tympanites was as bad as ever. During this rest from labors, I

had read two articles by Dr. Sutton of Pittsburg, on fissure of the anus in male and female, describing the symptoms which fitted my patient as well as anything else did. The cases of cure were so graphically given, so convincing and so successfully treated by anal stretching, that I was confident my patient had an anal fissure, and that I had overlooked it. Dr. Sutton, when commenting on the benefits resulting from stretching the sphincter, remarked that equal benefit had occurred by the procedure even if there were all the pelvic symptoms of fissure, and the fissure not there. I made a very careful examination of my patient's rectum, turning it out by my finger from the vagina, and the fissure was not there. I nevertheless determined to make the operation, and gradually getting both thumbs through the sphincter I *eked* with all my might, and my patient received her third nervous shock, which, up to date, has proved to be sufficient. At the time of this operation the abdomen was enlarged equal to the full term of pregnancy by tympanites, which disappeared in a few days, and has not returned.

I am positive that the criticism of this case cannot be that it was one of hysteria, or "speculum mania." I regard the affection as having been *vaso-motor* in character, probably originating from irritation of uterine organs following child-birth and miscarriages, and I think there was some, and had been more, pelvic cellutitis, and I also believe, now, that the series of nervous shocks she received by fraud, accident and design, cured her.

CASE II.—Master J., aged six years, has for a year been unable to retain his urine when awake, more than half an hour. In fact, his mother states that he is continually making water. He is habitually pulling at the prepuce, which has become unnaturally elongated by this habit. The prepuce is not tight, but is retracted over the glans, and there is no lack of cleanliness. The urine was examined for deposits and proofs of cystitis, and bladder sounded for stone—all giving negative results. After sounding for stone the symptoms were relieved for a time, but returning it was deemed best to cut off the prepuce which was done, and was followed by recovery. To get at the chain of antecedents and sequence in this case, I made much persistent enquiry, and became satisfied that the first phenomena of this series was the habit formed by the boy of pulling on the prepuce, which was followed by a discharge of urine because of the pull, and not because of the length of the prepuce. I think the shock of the operation, as well as diminished length of prepuce, broke up the habit and the disease.

[TO BE CONTINUED.]

Article XX.

Medical Orthodxy.* By T. D. Washburn, M. D., of Hillsboro, Ills.

[concluded.]

Ethics.—Having satd this much, my impartial hearers are prepared to listen to a few suggestions on the vexed question of ethics—and here I must be brief. I will touch but a single point, consultations; and as open confession is good for the soul, I'll take the witness stand:

Query. Did you visit Mrs. N. in a neighboring village, when Dr. C. an eclectic was attending?

Ans. I did, and knew he was in attendance; she had, sometime before been my patient, wished to see me and I went. I advised a certain course, to which he assented, and faithfully carried out. He wrote me afterward and some modifications were made. I found him a well read man, ambitious in his profession, and quite willing to listen to advice from one who was not of his school. I met other cases with him afterward, and always found him well posted and reliable, willing to carry out my suggestions while having an opinion of his own. I have consulted with some of the regular school far inferior to him, both in native and acquired ability. I advised him in regard to certain authors of our school, and he expressed a desire to examine them, though I found he had a good library not confined to any one school.

2nd. Query. Did you visit that surgical case in Black Jack township and meet a homœopath?

Ans. I did, and found him as good an assistant as I care to have in a severe case like that. He took in the situation at once, and we harmonized completely. True I did not expect to meet him when I started; did not know he had been called, but it

* This paper and the discussion following it, form a part of the transactions of the Tri-State Medical Society, which met in St. Louis, Oct. 25th, 26th, and 27th, 1881.

made no difference. I met him again some time after, in one of his own cases, by his invitation. Prof. G. was up from St. Louis, and we talked the case over as though we were all from the same school, and I never felt very bad about it. He never calls me in a medical case, as he knows I have no faith in "little pills." And yet this ghost of ethics will not down! It is a fossil which marks the decrepitude of the age which made it. Do you consult with anything and everybody? No! But you may safely consult with men of brains, that take a pride in their profession; that give evidence of study and growth. Why muzzle the medical man with ethics that society does not recognize, or good sense approve? In this case we can risk the "survival of the fittes." Ordinary sense and common morality seem sufficient guides even for professional men. I admit a halo of reverance and smell of sanctity lingers around this venerable relict, but why worship dead rubbish? Here you must allow me to introduce Dr. Stone of Minn., who presided at the late meeting of the State Society. He gave the *code* such frightful blows, that he fairly excites our sympathy in its behalf. (See *Chicago Med. Review* of July 20.) He takes up *seriatim* the code and probes unmercifully its windy pretensions; and would you believe it, those northern ninnies had the effrontry to knuckle to the man, and by a rising vote present their thanks; worse than that, they requested a copy for publication in the *secular* papers (insult to injury); if this had happened in the warm blooded south, our feelings might not have been so fearfully shocked, but in the polar regions of Minn., where the blood only makes about two revolutions a minute, it betrays a depth of depravity wholly unexpected.

Dr. Leasure in his address of welcome, startles us by saying; "We have progressed quite as much in unlearning hoary errors, as in finding new truths." But President Stone, disavowing any "*carping spirit*," boldly utters the naked truth and says: "The code, since its final adoption has apparently been laid upon the shelf by the family bible, to be treated with almost as much reverence, to be used quite as seldom, and to be quoted only when its provisions enable one to discipline a rival, or to exclude him from the benefits of professional affiliation." "A judicial consideration of the code, forces the conclusion that much which it contains is gratuitous insult to the profession, and more is rather calculated to amuse, than impress with respect the mind

of the layman." The whole speech is replete with good sense. But lest you charge me with prejudice, I will summon another witness. I will not call the Hub, where we have some reason to believe the code is already embalmed and carefully laid away in granite, with some old veterans to stand guard, for fear it might break loose before Gabriel sounds his trumpet, but we will call her big sister, New York. The spicy "*Gazette*" speaking of professional etiquette in connection with the case of Beaconsfield, where Dr. Jenner declined, and Dr. Quain accepted a consultation with the attending homœopath, says: If the practitionor is to be guided by the code of ethics, the question hinges on the query, who is, and who is not a regular practitioner? The code answers this as follows:

'No one can be considered as a regular practitioner, or a fit associate in consultation, whose practice is based on an exclusive dogma, to the rejection of the accumulated experience of the profession and the aids actually furnished by anatomy, physiology, pathology and organic chemistry.' The laity who look at the subject superficially, regard with ridicule a doctor who refuses to meet an irregular when the interests, perhaps life of a patient may be at stake; * * * * * * * * Certainly the law here is not a rigid one, since it allows consultation with any practitioner whose practice is not based on an exclusive dogma. This does not seem to exclude homœopaths who practice allopathy, and which of them all does not?" (The same also can be said of eclectics.) "As long as human nature is imperfect, so long we must submit to be governed by a code of ethics; but as this is only the expression of the representative voice of the profession, it must necessarily change with the ever varying tide of opinion. * * * * * This tide he admits, is "setting strongly" towards *liberalism*, but advises a *happy medium* between the two extremes. This seems to be a foundation principle on which we can safely build, and the only tenable position for genuine orthodoxy.

When such distinguished minds as Herbert Spencer, exhaust the very fountains of erudition, giving us over 200 octavo pages on the subject of *ethics*, and still fails to formulate a code, or present anything more than general principles, adapted to the age' culture and peculiar environment; a sort of sliding scale, like a thermometer suited to the temperature and locality in which it is to be used; surely, we can afford to give some margin for a

medical code, and not make a procrustian bed for a tired doctor to sleep on.

Eighteen hundred years ago, a very distinguished class of men gathered around a prominent character and teacher, and propounded such grave questions as these: "Why do thy disciples transgress the tradition of the elders? For they wash not their hands when they eat bread." Is it not about time we quit asking such questions as these?

A distinguished author says: "It may be doubted, whether the human race can ever gain anything by departing from the principle of utility as the sole criterion of good morality, and there is an increasing tendency to recognize the supremacy of this principle, both in morals and legislation." Now, if utility is the criterion and the *code* has ceased to be utilized only as a "cat o' nine tails," a weapon of discipline, let us bury the thing, and have President Stone pronounce its epitaph. Admit the code to be faultless, every word true; did it never strike you that it was more suitable for adolescence than maturity? But lest I am accused of injustic and some think I would rob them of any substitute for the code, allow me to advise the adoption of the "*new version*," and if this is too modern, our conservative friends might use the *decalogue;* these failing, why not adopt the Draconian code as a medium? While I have but briefly adverted to many points in these complex questions, I trust sufficient has been said to enable you to arrive at a few of the legtitimate conclusions which must influence us in establishing an orthodox creed, and erecting a platform broad enough for all true men to stand on; while it rigidly excludes those who make medicine a mere trade, who enter it half fledged, as a mere matter of speculation, and pander only to the lowest elements of our nature, stimulated merely by dirty parsimony and filthy greed; from all such, "Good Lord deliver us."

I fear my time will hardly allow me to enter on the discussion of legislation. While this is a sort of "terra incognita," still the public sentiment of the country is evidently prepared for judicious enactments in this direction.

Missouri meant well when she placed on her statutes, the necessity of a diploma; but when immediately after she chartered a school in her proud metropolis for the mere manufacture of diplomas, a thing to protect quacks, under the guise of eclectic medicine, she made a great mistake.

Illinois made a grand advance when she made her Board of Health custodians of her views, for medical acquirements, and hedged quackery in less compass than any previous legislation; yet many find fault with even this substantial gain, and with facile pen abuse and torture both the statute and the board. Very easy to find fault gentlemen, but why not put in your claims for better specifications? New York has done still better, having the advantage of the experience and errors of others. The signs are hopeful that greater excellence will prevail, and beneficent and wise laws be formed on most of our statute books, regulating the requirements and practice of medicine.

In a new and rapidly growing country like our own, perfection in legislation could hardly be expected. False notions of freedom, old established customs and habits are not easily broken up, and gradual growth in this direction should satisfy us. We have no reason for discouragement, no excuse for flagging in our effort to sustain and build better than the Fathers. Those who have given attention to what medical legislation and enactments we have had, have not failed to discover a want of uniformity and equity in many of them. Some are premature; some lax and irrelevant, but grouping all the legislation of the last decade in one general summary, culling the best and rejecting the worst, we arrive at quite satisfactory results, which give much promise for the future.

Allow me here to commend to your favorable notice an article read by Dr. McLelland at the last session of the Ills., State Med., Society, giving a digest and summary of all medical legislation to date. It is a paper of real merit and deserves a wide circulation, and could well be made the basis of wiser enactments than any yet reached. Even Massachusetts might learn something from it and be able to formulate a law (for she has none now), which her worthy sons could endorse.

As charity should begin at home, but not end there, I will venture a few strictures on my own state, Illinois. The *ten year* clause of preliminary practice has undoubtedly been much abused, and not a few are in practice to-day, shielded by this, who are totally unfit. New York acted more wisely when she required at the close of two years more, a legitimate diploma, or authenticated certificate.

2nd. I think it entirely in the province of legislation to require that all students preparing to enter the study of medi-

cine should have a rigid examination in regard to their qualification and ability to use their mother tongue; evidence of a good English education should be demanded. I mean this; any one who cannot take some topic and fill a page of note paper, say 150 words, legibly written and properly spelled, should be remanded to the common school. He should not be allowed to study medicine.

3rd. The law of Illinois is evidently deficient in the proper legislation to enforce it. Some states leave it for the action of the grand jury; some specific rule should be provided. One more difficulty has been present which the Board are evidently trying to eliminate, and that is these spurious "jim-jam" schools which claim recognition and endorsement, when they know they are bankrupt and clumsy shams.

Of course, bogus diplomas should be squelched, and both the man who sells and the man who buys should be justly enclosed, like Dr. Buchanan, in prison walls. In looking over the field as presented by Dr. McLelland, extending from Maine to Texas we have reason to rejoice that we are so much in accord, and are convinced that a little judicious conference would give us a national statute which would harmonize all true physicians, and all sects and systems worthy the confidence of an enlightened public. Could not our national association be beguiled into some conservative action in this direction, and make a doctor who would pass as current as a greenback from Florida to Minnesota? We should aim at no legislation that will do injustice to any one. It is quite as much the interest of the people that they be protected from incompetence and pretense, as that professional aspirations be guarded and fostered. The incapable should be shut out; the competent endorsed and sustained.

We believe the day is dawning; already the light of genuine orthodoxy is gradually penetrating the thinking minds of the profession and cautiously creeping into our medical literature, and making its mark on the ethics of the profession, breaking down the artificial distinctions and foolish traditions which like the sins of Adam have been handed down from generation to generation. Speed the day when the medical millenium shall arrive. Then the *allopathic* wolf shall dwell with the *homœopathic* lamb, and the *eclectic* leopard shall lie down with the *regular* kid, and the *medical* calf and *hoary lion* of the *college* and the *fattling* of the *city* shall feed on the same *ethics*, and eat science as the ox eats straw.

Article XXI.

The Rational Treatment of Pneumonia.* By J. M. Armstrong, M. D., of Edwardsville, Ill.

Croupous pneumonia is an acute inflammatory, infectious disease, with a natural tendency under favorable circumstances, to terminate in recovery, by a sudden crisis occurring on the fifth and seventh day in adults, and from the second to the fifth in children. There is probably not a disease that afflicts mankind that a more diversity of opinion, regarding the treatment to be pursued is advocated by the profession than in pneumonia. It has been the type of inflammatory diseases—the treatment of which has been the basis upon which the foundation was laid for the treatment of all inflammatory affections. The indications presented for treatment in pneumonia are to relieve pain and dyspnœa, reduce the heat, prevent the exudation in the lungs from coagulating, sustain the action of the heart and support the strength of the patient. Any treatment devised that will fulfill these indications, may very appropriately be called the "rational treatment of pneumonia." Such a treatment we propose to present to you to-day.

To relieve pain and dyspnœa and reduce the heat. When a membrane is inflamed, the pain becomes one of the most prominent features for the relief of which we must direct our treatment. The pain in pneumonia is from the involvement of the pleura in the inflammatory process. Respiration is therefore, painful and difficult, and the pain is aggravated or intensified in direct ratio to the amount of motion induced by the act of respiration. If motion can be restrained, pain will be diminished. Pain is also produced by the quickened circulation which not only augments it, but elevates the temperature of the body. We have now before us a patient whose breathing is hurried and difficult, who coughs at intervals, and complains of pain in the side, whose pulse is rapid and whose temperature is considerably elevated. The history of the attack, together with auscultation, developes

*Read before the Madison Co. Medical Society, July, 26, 1881.

the fact that he has pneumonia. The natural tendency of mankind when sick, is to recovery; particularly is this true in pneumonia, and the effort that nature puts forth to relieve the diseased portion, may be studied with advantage. If we could see the inflamed membrane, we would find its surface covered with a fluid closely adherent to it; a little farther on in the process, that fluid would be more abundant and dense. Nature is forming a splint to support the membrane, a covering, so that when the two membranes meet, they will not come in contact. A cushion will be interposed; motion will be lessened; pain will be modified by the interposition of this exudation. Nature is endeavoring to relieve the difficulty by preventing friction and giving the parts rest.

There are possible and impossible things in medicine as in everything else. It is poetical to say, "strike at the root of the disease," but practically, it is difficult and dangerous, if not impossible. On theoretical grounds, it is recommended that as the lungs and pleura were the initial starting point, that the remedies given should be selected with reference to their therapeutical effect upon these parts. "Strike at the root of the disease," and when the inflammatory action is suppressed, the effects upon the system arising from that diseased condition, will subside. This may be proper in some diseases, but in pneumonia it is not a safe practice. The proper thing to do in the treatment of pneumonia, is to take the patient where you find him, and lead him back to where he started from. The initial lesion in his case was an irritation of the lining membrane of the air tubes or air cells; congestion followed, then inflammation. The effect of this condition is to produce an accelerated pulse and develope heat, which are now the dangerous conditions. To relieve pain and dyspnœa and reduce the heat. Take a sheet—an old one—and tear it in two lengths, fold it three times, dip it in water at the temperature of 80° Fahr., and wrap it tightly three times around the chest of your patient; he may complain a little when it is first applied, but in a few minutes he will tell you that he feels so comfortable—at about this time you will be giving directions to have the wet, cold bandage reapplied every ten or fifteen minutes, or as often as the feelings of the patient may require it, and if you meet with the same success that has attended us of late, the directions will hardly be given before the patient will express a desire to have it renewed. By this pro-

cess you subdue the heat, relieve the dyspnœa, lower the pulse, lessen the respiration and reduce the pain to a minimum. The heat is subdued by the direct application of cold, the breathing becomes easier as the result, and pain is relieved by the bandage. The application of a bandage around the chest acts as a support to the respiratory muscles, reducingtheir movements to a minimum, compelling rest. In all other inflammatory affections the therapeutic influence of rest is well recognized and strictly enjoined, and although we cannot forbid our patient expanding his chest, we can reduce that expansion to a minimum by a properly applied bandage.

It may be stated as an objection to the bandage, that one of the dangers in pneumonia results from the non-aëration of the blood, and that by the application of a bandage around healthy as well as diseased structures, it would diminish the ingress of air into the healthy portion, and not a sufficient amount would come in contact with the blood, and thereby increase that morbid state.

If the free access of air into the air passages, in pneumonia, was a curative measure, why has not some genius invented a pump, by means of which air could be forced in, and if the deficient supply of oxygen was the cause of the carbonic acid poisoning, it could be very easily supplied. The fact is that this is not the cause of the carbonic poisoning, but the cause lies in another direction. The undue amount of heat, the influence of long continued high temperature upon the organism, affects the functions of the red globules, as carriers of active oxygen, and diminishes the oxidizing power of the blood. Carbonic acid accumulates until the alkalinity of the blood is changed, and the red globules die—necræmia. By the application of the cold, the heat of the blood is reduced, the red globules assume their wonted functions, carbonic acid is eliminated, and peace once more is restored in that disturbed organism. The bandage has nothing whatever to do with the entrance of air into the lungs, it merely prevents surplus mobility. The wet bandage has been renewed every ten or fifteen minutes for one or two hours; now let us see what we have accomplished. The patient was found with a fever, a temperature of 104° Fahr., pulse 120, respiration 30, very restless, suffering from pain in the side, accompanied and aggravated with a cough. We now have him with a temperature of 99° to 100° Fahr., pulse 90 to 100, respiration 18 to 24,

pain modified if not gone; cough loose and less frequent. Is there an arterial sedative, is there a hypnotic, is there a drug or earth whose therapeutic action is at the "root of the disease," that will accomplish such results? No! Having arrived at this point, it becomes necessary to prevent the already existing exudation in the lungs from solidifying, and sustain the action of the heart. Administer a medicine, not a combination of drugs, but a medicine whose action upon the animal economy will be to antidote or correct the many disordered functions that have arisen from one single cause—congestion of the lungs. If a child should eat a few berries of the common night-shade, that grows so abundantly in almost every yard in this city, the following symptoms will present themselves: fever, dryness of the mouth and fauces, difficulty in swallowing, suffusion of the eyes with dilated pupils, colicky pains, redness of the skin, optical illusions, singing in the ears, numbness of the extremities, gidiness, delirium and intoxication; farther on there would be coma, twitching of the muscles of the right side, and general convulsions, opisthotonus etc.; there would also be constipation, cough with quickenened respiration and dry sibilant rhonchus. The urine would be suppressed, the extremities cold. Here are a train of symptoms, that if they should occur in a patient from some hidden cause, like malaria for instance, in accordance with the prevalent practice, a drug store would be called into requisition to relieve them. There would be given a purgative, a febrifuge, a sudorific, a diuretic, an opiate, an hypnotic, an antipyretic, an expectorant, demulcent, together with all the adjuncts, counter-irritants, sinapisms, blisters and what-nots.

The patient might recover, but if so, it would be through the influence of one medium—the opiate, which would antidote or correct all the symptoms which had arisen from one single cause. Therefore give one medicine, the therapeutics of which will cover or antidote existing symptoms and permit the patient to recover without disturbing the quiet and peaceful restoration to their normal functions of other portions of the system, that may have been disturbed by the introduction of one exciting cause. All the symptoms and all conditions in pneumonia are the effect of one exciting cause. The effect of a cause may and does at times become a disease within itself, but until that condition is made manifest, let the remedies be directed to the source from whence the disturbance

aries. We are speaking now of internal medication, and do not refer to the fever or those conditions which are controlled, or ought to be by external applications. A medicine should be given that *will not* derange the digestion, irritate the stomach, acidify the blood, constipate the bowels, weaken the heart, paralyze the nervous system, lock up the secretions or depress the patient; but one that will aid digestion, preserve the alkalinity of the blood, strengthen the heart, support the nervous system, liquefy existing secretions and stimulate the patient, for new relaxation will follow the period of excitement. Have we such a medicine? Ammonium chloride. This salt is well known; it is not necessary to introduce it, its cheapness may be one reason why its therapeutic value in pneumonia is so little recognized; its medical properties are those of a stimulant; "it improves the appetite and gives a certain buoyancy to the spirits." It improves the appetite and aids digestion by giving up one of its component parts to the juices of the stomach, chlorine which very readily unites with hydrogen to form HCl, and the quantity that is formed, is not too much to prove an irritant, but just right to supply the want. It does not acidify the blood from the same cause, but counteracts the formation or accumulation of CO_2 by uniting with the different salts to form chlorides, it having a stronger affinity for the salts than the CO_2 which being the weakest chemical combination, is set free, and eliminated. In pneumonia, there is an absence or a diminished amount of the chlorides in the urine. The continued use of this salt supplies that deficiency. The urine loses its reddish cast and strong ammoniacal odor, and becomes natural in color, odor and quantity. The tongue does not become coated or dry and cracked, sordes do not collect upon the teeth. The liver performs its functions undisturbed, and the bowels move when the accumulations are sufficient and they are of the proper color and consistence. Consolidation of lung-tissue suddenly disappears, and resolution is rapidly established; dilirium never supervenes, that is "hardly ever." and critical periods are lost sight of. The patient improves hour by hour from the time this treatment is fairly under way. This, gentleman, is the treatment for croupous pneumonia. It may be necessary, however, to administer an opiate; if so, give it, and when it has done what it was intended to do, cease giving it. Under similar circumstances, it may be necessary to give a cathartic; if so, give it. The heart may at times fail; if so give

10 to 20 drops of digitalis, and watch its effect; if it has to be repeated in 12 or 24 hours, do so. To support the strength of the patient: for this purpose, use fresh, sweet milk, crackers, bread and butter, and season it with salt. There is another chloride, and a good one too. It will follow right along behind the other chloride and finish up what work its predecessor has left but partly done. A study of the therapeutics of these two chlorides, with reference to the indications that call for treatment in croupous pneumonia, will convince any one, we think, that little more will be desired, and nothing else, where the fever, pulse and respiration are controlled with cold water. In the treatment of catarrhal pneumonia, we use the same treatment. By the application of a cold wet bandage, last winter, we succeeded in reducing the following condition to nearly normal standard in thirty minutes: A young married woman, measles seven days; 2 A. M., pulse 130, temperature 102½°, respiration 83. This was in the practice of Dr. K—, of this city. A cold wet bandage was applied tightly around the chest, with the admonition to the patient to breathe slower and deeper. The bandage was renewed every ten minutes. In ten minutes the respiration was 65; in ten more it was 40; in ten more it was 28; pulse 100, temperature 99°; in one hour it was the same. The patient, of course recovered rapidly. This patient, from either real or imaginary exhaustion would have died in a very short time, if something had not been done to rouse her energies. Collapse of the lung would have certainly supervened. When a plug forms in a bronchus, there is but one way to discharge it, and that is to direct a stream of cold water at a point on the spinal column midway between the shoulder blades, or apply suddenly a cloth wrung out of ice water; the patient, from the shock, will make a violent effort to cough, and discharge the plug, and prevent collapse.

The dose of chloride of ammonium, is from two to four grains every hour, in water.

Article XXII.

NOTES ON CASES IN GENITO-URINARY SURGERY.

—Case No. V.—

Stricture near the Orifice and at the Bulb of large Calibre. Chronic Prostato-Cystitis.—Division of the Anterior Stricture.—Dilatation of the one at the Bulb.—Cure.

By W. Hutson Ford, M. D., of St. Louis.

February 26, 1880. Mr. S. G. Traveling salesman formerly, now a clerk in a wholesale dry-goods house. Married, with two children. No inheritance of gout, rheumatism or phthisis. Uses tobacco, but no wine or spirits. Had a gonorrhœa eight years ago, followed by a long-continued gleet. No instrument ever passed into the urethra. Never had syphilis, though he bears a suspicious scar on the dorsum of the glans penis. Has a varicocele on the left side. Complains of easy fatigue, listlessness, wakefulness, indigestion and occasional swellings about the face of uncertain character and extent. Has never passed any blood. No pain before, during or after micturition. The prostate is somewhat enlarged and tender; the urethra hypersensitive. Just within the meatus, a contraction of 25 exists, and for two inches down, the canal is scarcely wider. 25 barely passes bulb, and then with much pain and a jerk. A well defined induration is felt in the roof at this point.

Feb. 27. Urine dark colored, very acid. No albumen. Sp. gr. 1030. No pus. Deposits an abnormal amount of mucus. Strings of mucus are suspended in it.

Feb. 28. c. s. 25 engaged in bulbar contraction but would not pass through. Chologogue pill to-night. Warm baths twice a week. Warm hip baths every night. Soda and Pareira infusion. Diluents.

March 2. c. s. 25 passed through bulbar contraction.

March 6. Anterior stricture divided to 35. 30 just passes through a contracted tract below. 25 passes well through deep contraction but rather tightly.

Division of Anterior Contraction.

March 10. C. S. 29 passed easily through perineal contraction.

March 14. C. S. 29 passed easily. C. S. 31½ passed into, but not through the perineal contraction. The meatus is kept well open.

March 18. C. S. 31½ passed fairly through bulb with some urging.

March 21. C. S. 31½ passed fairly as at last introduction.

March 25. C. S. 31½ passed more easily.

March 30. C. S. 32 passed bulb, but not without sensible urging, and with a jerk. The meatus shows a disposition to close. Patient says he feels greatly better and stronger. Appetite and digestion excellent. Bowels are regulated with a cholagogue pill and saline aperient, once a week or so. Passes a full, round stream of water.

April 4. C. S. 32 passed almost without pressure. Orificial contraction freely incised again, as it had closed up to 29. This was brought about, not by incomplete division, but by the use of an erroneously numbered bulb for keeping the cut open; a No. 29 having been stamped 33 by the manufacturer.

The patient is greatly improved at all points.

April 9. C. S. 32 passes easily. C. S. 33 passes through bulb. B. B. 29 passes with difficulty. The urine is decidedly acid, and deposits a thick layer of pus. The orificial stricture is well healed. Pareira Brava, and Bicarb. of Soda.

Recurrence of Symptoms.

April 13. Urine greatly improved, nearly clear, slightly acid; general condition very good. B. B. 29 passes bulb with some grasping. C. S. 32 enters the bladder.

April 16. B. B. 29 passes bulb with some difficulty. C. S. 33 passes bulb with tolerable ease. He is much improved in health and appearance.

April 19. C. S. 32 passes easily through the bulb. He is so much better, that with general directions, especially as regards diet and the use of the sound, he was discharged. Two months later he still continued well.

Recovery.

Translations.

Article XXIII.

FROM THE FRENCH.

Excerpts from Late French Journals. [Translated for the Journal.] By A. H. Ohmann-Dumesnil, A. M., M. D., of St. Louis.

Electricity in Uterine Diseases.—M. Hélot, of Rouen, speaks highly of this method of treatment in chronic engorgement accompanied by prolapse. He states that the uterine catarrh has disappeared under the influence of the changes brought about by the current, and that he has never felt the necessity of making applications to the neck in order to see the ulcerations disappear.

The apparatus consists of 12 Gaiffe elements, 15 centimetres high, (chloride of zinc and oxide of manganese), a rheostat, a Trouvé interrupter and a galvanometer divided into milliwebers.

The author thinks himself justified in making the following conclusions:

1st. The uterus, under the influence of electric currents, presents plainly contractions, not only during pregnancy or immediately after delivery, but also in an empty state.

2d. The contractions can be made visible in certain pathological conditions where a mucous plug in the cervix retains the secretions of the uterus. The contraction drives out this index, which takes its former position as if aspirated, when the contraction has ceased.

3d. The contractions may be obtained by a Faradic current, interrupted a great many times in a second; but this method is painful and its use ought to be limited to post-partum hemorrhages.

4th. Galvanization by interrupting continued currents provokes this contraction in a more favorable manner, because it

causes less pain and because there is added to the mechanical effect the electric action of the pile, rendered harmless by the frequent change of chemical action into motion.

5th. The maximum of useful effect has been produced with a current of 25 to 30 milliweber interrupted each second for a very short space of time.—[*Paris Médical.*

CHLOROFORM FOR ANÆSTHETIC PURPOSES.—M. Lucas-Championnière, struck with the difference seen in the chloroforming of different patients, concluded that they were partly due to the susceptibilities of patients and to a greater extent to difference in composition of the chloroform. Accidents may be due to impurities in the liquid. Having submitted several samples, taken from hospitals to M. Yvon for analysis, the latter without discovering impurities with ordinary reagents, found the boiling point different. Placing the chloroform for a certain time, in contact with permanganate of potassium and distilling it, gives an article having the advantage of rapidly inducing anæsthesia and allowing a safe recovery.—[*France Médicale.*

SECTION AND LITHOLAPAXY.—M. Zancarrol, in a memoir containing the record of a large number of operations, one hundred and four of extraction of stone by section, and eighty-four by litholopaxy, practiced at the Greek Hospital, in Alexandria, Egypt, a country where stone in the bladder is of very frequent occurrence, establishes a comparison between section, lithotrity and litholopaxy. From his experience he concludes that the last is by far the best operation.—[*Gazette des Hôpitaux.*

OVARIOTOMY DURING GESTATION—M. Galenvaux has practiced gastrotomy eight times. Once death followed, the complete removal of the uterus and ovaries. Of the other seven, five were enabled to resume their daily vocations, in two weeks. The two remaining cases were operated during pregnancy and made perfect recoveries, the gestation going on to term. The tumors were rather abdominal than ovarian and pediculated.—[*Bull de l'Acad. Royale de Méd. de Belgique.*

PROPHYLAXIS OF DIPHTHERIA:—M. Decroizelles proposes the following for hospitals, the numerous deaths of internes that have lately occurred, having drawn his attention to the subject.

Numerous carbolic acid sprays should be kept going on in the diphtheria wards, although the object is not exactly the same as in surgery.

The greatest cleanliness must be observed in wards, ablutions must be easily accomplished and all products coming from the diseased should be immediately destroyed.

For autopsies, at least, the respirator of Herrot Rheinus (which is provided with a mask) should be employed.

All physicians should adhere strictly to a certain dietetic and hygienic course, and to obtain better hygienic conditions, internes should have increased salary to be enabled to spend more on their apartments. Internes ought never to be allowed to see their patients before having partaken of a breakfast.—[*Revue Médicale.*

INTOXICATION FROM RUBBER.—An infant attacked with impetigo of the face, was ordered a rubber mask. The child soon had vomiting, diarrhœa and extreme prostration, which could not be accounted for. The rubber mask was removed, and all the symptoms disappeared. It is probable that there was poisoning by sulphide of carbon with which some rubber cloths are heavily impregnated. This is proven by the fact that a gutta-percha mask being substituted, no outward symptoms came on.—[*Journal de Med. et de Chirurg. Prat.*

STATE OF NERVES AFTER DEATH.—Charles Richet, in a communication to the Société de Biologie has made the statement that, after the death of an animal, the sensory nerves continue to preserve their functions for a longer time than the motor nerves.—[*Gazette des Hôpitaux.*

MICROBION OF MUMPS.—Capitau and Charrin have made researches on the pathology of parotitis. Repeated cultures made in Liebig *bouillon* with the blood of thirteen patients, have always showed the same forms (small rods, from two to three q and micrococus) and similar in aspect to those contained in the blood. All possible precautions were taken to guard against errors.

The saliva contained a large number of organisms, but as they are also met with normally, no importance was attached to this fact.

Urine taken at the middle of micturition contained nothing; but in one case there was observed the presence of retractile albumen and numerous microbia intimately connected with those of the disease. This is perhaps another case of infectious nephritis to be added to the twenty-four already known.

In conlusion: the blood of the parotid in mumps, contains organisms; they are genuine microbia, as they can be multiplied by culture. It remains to reproduce the disease by means of inoculations from cultures, which the authors have up to this time attempted in vain.—[*Ibid.*

THE FINAL PERIOD OF EXCRETION OF URINE AND SPERM.—M. A. Guérin does not speak of the action of the bladder, but when the urine has arrived in the urethra, how is it projected outwards, at least the last few drops. It cannot be admitted that the bulbo-cavernous muscle is sufficient.

The following are the conclusions of this interesting paper:

1st The bulbo cavernous muscles are insufficient to fulfill the functions that physiologists have attributed to them.

2d. They act only through the medium of the blood contained in the bulb.

3d. The blood, under the impulse given by the contraction of the bulbo cavernous muscles, presses the mucous membrane of the urethra from behind forwards, thus accelerating the jet of urine, when the contraction is moderate, and so as to eject the last drops when the contraction has arrived to that state which has earned for it the name of *coup de piston.*

4th. The excretion of sperm is insufficient each time that the circulation of blood from the bulb towards the glans is intercepted.

5th. This theory explains the spasmodic strictures of the urethra and enables one to foresee that men cannot be catheterized as easily at the instant of turgescence of the spongy tissue of the urethra.

The author then added that this explained why men were always catheterized with the greatest difficulty by students of the opposite sex.—[*Bull de l'Acad. de Méd de Paris.*

Article XXIV.

Cold Abscesses; their Nature and Treatment. By F. Leprevost. Translated from *la Revue Médicale Francaise et Etrangère.* By Wm. G. Eggleston, M. D., Hampden Sidney, Va.

To the old definition of cold abscesses, "*purulent collections, which have developed slowly and quietly, often without pain, in the cellular tissue,*" micrographical studies have added a new element, important in an anatomico-physiological view, which materially modifies the nature of these abscesses. That which characterizes more particularly these liquid tumors, is the constant presence of an enveloping membrane; a membranous sac, resembling ordinary cyst sacs.

This isolated wall or partition has not escaped the notice of observers; on the contrary its nature and rôle have given rise to a great number and variety of interpretations. Whilst that membraniform layer is by some considered inert, purely passive, and resulting from a thickening of the surrounding tissue by the gradual accumulation of the purulent liquid; others, convinced by the labors of Hunter and Chaussier, see in that membrane a product of the secretion furnished by the vessels of the affected region; or again, the result of the infiltration of the neighboring tissues by the plastic elements of inflammation.

For Ev. Howe and Delpech, this pseudomembranous coat possesses a high importance. That is, says Demonvilliers, a new organ which ranks high in the vital economy, which secretes, absorbs, sometimes manifests sensibility, and can under certain conditions, be influenced by the state of the principal viscera, and react in its turn on the rest of the organism. Of all the properties manifested by it, the most remarkable are, its continuous absorption and its secretion of pus in its cavity.

It has been rightly termed a *pyogenic membrane.* M. Lannelongue has explicitly defined the rôle of this membrane. If one examines a child with a cold abscess, taking care to examine it naked, and minutely explore the whole cutaneous surface, a small

swelling will often be found at some place, sometimes as large as a pea. In certain cases it may be superficial and easily found; more often hid among the tissues in the thickness of the muscles, it escapes observation until growing, it shows itself externally. Gradually the little nodule enlarges; from hard to soft, and finally becomes fluctuating. These little growths have received at the Saint Louis School the name gummæ. M. Lannelongue calls them *tuberculomes*. M. Brissaud and Josias have in fact, demonstrated their tuberculous nature. They are made up of an aggregation of tubercular elements; but they soon undergo transformation and modification. As soon as the peripheral layer of the embryonic cells becomes active, infiltrating and invading the tissues, the central part of the tumor softens. It loosens itself in consequence of the granular alterations undergone by its constituent cells. So that the tumor primarily solid, gradually gives place to a more or less liquid collection, surrounded by a resisting sac.

The abscess is now formed, but how does it grow? It was formerly entertained, that the puriform collections, slipping along the aponeuroses, traversed the spaces of the cellular tissue, favored in their progress by the muscular contractions, and the arterial beats, developed often by the force of gravity and the declivity.

That likewise explains the migration of those voluminous mediastinal abscesses which point out a great distance from their origin. But, we also notice now, not only the cold abscesses, properly so-called, but also conge tive abscesses, which are only cold abscesses occasioned by an osseous lesion.

Undoubtedly the conditions of the tissues, of the weight and declivity secondarily affect the development of the cold abscesses, but the reason *sine quâ non* of the development of the abscess rests in the limiting membrane itself.

To convince any one of this it is only necessary to examine the intimate structure of this membrane.

If after having applied an Esmarch's bandage to prevent a hemorrhage, we make by a straight or curved incision in the lower portion of the cold abscess, a kind of window, so that after evacuation of the pus, we can examine the internal surface of the cavity, we see that it presents an ill-looking appearance, uneven and rough, covered with rounded eminences resembling granulations with pale projections and prominences like the papillary

muscles of the heart. The color is greyish but not uniform. Here and there we see roughened ecchymotic specks or spots. Sometimes we may see spontaneous hemorrhages.

The cavity of the abscess is sometimes regular, ovoid or cylindrical, sometimes broken and partitioned off, divided by bows or floating membranous bands. When the abscess is small, we may with patience decorticate it, as in case of a sebaceous cyst. We see then, that the external surface of the pocket, smooth and united to the vicinity of the aponeuroses, presents among other things, small conical or conoidal prolongations, true granulations, comparable to the soft vegetations of wounds: these exterior vegetations, as M. Lannelongue remarks, like the vessels penetrate the surrounding tissues. "They insinuate themselves in the normal orifices of the fibrous tissues of aponeuroses for example, and on taking out the pocket, one notices the abnormal and unusual orifices made by the penetration of the granulations, in the normal vascular orifices, dilated by the granulations. The same appearance presents in the periosteum. When the cold abscess stops, as in the foot, in the ligamentous and fibrous tissues, the vascular prolongations, veritable granulations, penetrate in the intervals of the fibrous tissues, and sometimes insinuate themselves very far from the pocket proper; they form the fungous and faintly red prolongations, which it is important to recognise so that the whole may be excised. This is an important point regarding these simple cold abscesses, because for the osseous abscesses which form in the same region, the condition is still more remarkable, and the pouch sends on every side its prolongations." The above throws a living light upon the mechanism of the growth of the abscess. That it is not a passive act resulting simply from distension of the pouch. It is an active mechanism, a vital act, a gradual invasion, prior, furthermore to the presence of pus in the cavity.

The very remarkable differences which distinguish microscopically, the outer and inner surfaces of the pouches (pockets) are furthermore recognized and determined difinitely by the microscope. "Within, on the side of the cavity, the organic elements are the subject of a continuous work of disintegration and destruction which results in an augmentation of the contents. Without, in the tissues, there exists on the contrary, a proliferation full of activity joined to an organization more or less advanced, which has only time to arrest in the local instances,

proceeding from obstacles drawn from the same texture of these tissues. And in the interval between these two limits, the elements follow one or the other of these tendencies, or they decay and their *débris* collects in the cavities, in the tubercular follicles; or they unite and form solid tissues, such as one sees about the walls of certain vessels for example." Returning again to one definition, we say that cold abscesses *are purulent collections developing slowly, succeeding to solid tumors of a tuberculous nature and increasing by the proliferation and simultaneous destruction of their enveloping membrane.*

Since the limiting membrane of the abscess is not only the agent of the development, but its cause of existence (*raison d'être*) the *destruction* of this membrane is what should engage the attention of the surgeon. Puncture, irritating injections in the sac, are only as the results of the old practice have shown, illusory means to open widely the sac and take out by scraping or decorticating all the proliferatng coat or lamina is the efficacious practice which should be adopted. We should treat in this manner, not only simple cold abscesses, but also the vast collections symptomatic of osseous lesions. Doubtless we should hesitate, to attack with the bistoury, a congestive abscess which has not reached the limits of the abdominal cavity, but we can at least follow the example of Lister, Lucas-Championniére and Lannelongue and make a large incision into the canal portion of the sac when it exists. After having opened the cavity of the abscess at its lowest portion, we proceed to empty it with a slightly dull instrument—the handle of a knife, for instance. The bent finger introduced may serve as a good scoop or scraper. We may also draw the edges of the membrane out, if otherwise, difficult of extirpation.

When the sac is emptied completely, we should wash out the cavity with disinfectant liquids. Strong carbolic acid sol. 20 per cent., and gradually weakened, fulfills the indications perfectly. A drainage tube is placed in the cavity and daily injections are made until the purulent discharge ceases.

So far, the results of this method have been most satisfactory. In no case have the accidents usually found, followed; the hemorrhage is insignificant. The only complications thus far observed, were two cases of erysipelas which presented no difficulty.

Article LXXXV.

FROM THE SPANISH.

Study of the Etiology and Nature of Beriberi. By Dr. A. Pacifico Pereira. Translated from the *Gazeta Medica da Bahia*, for the Journal. By Joseph Workman, M. D., Toronto, Canada.

[concluded.]

The influence of all that conjunction of circumstances which must infallibly produce anoxhæmia and develope Beriberi, did not escape the medical sagacity of the distinguished surgeon o the *Vital D'Oliviera*. On page 104 of his report he says:

"Nothing but entrance into port could have alleviated our bad situation. In reality after the death in the hospital of the three above mentioned beriberics, nothing further of note happened. A few, while in port, entered the infirmary (? of the ship), but from enquiry I learned that they had suffered on the voyage, fearing to become my patients, because of the great number already laid up. The disease presented its three forms; the mixed was that which was most destructive, killing some and sparing others severely attacked. The Beriberics remaining on board improved quite manifestly, after being permitted to go ashore for recreation."

The report states that the bad hygienic conditions were further aggravated by the very bad system of scrubbing in our ships of war.

"Dry scrubbings," says Dr. Galdino, "are seldom employed; the most common way is to flood with salt water, and to wipe off with mops. This system although not inconvenient when adopted on the upper deck, has very hurtful effects, when employed in the lower lodging compartments. The sea water deposits a large quantity of saline principles, which are absorbed by the timbers; these, in their slow evaporation, keep the air moist for a long time."

"In our voyage the results of these washings were per-

nicious in the parts under deck, which were almost every day at uncertain hours, inundated with salt water; there was a constantly humid atmosphere; the men breakfasted and dined with chilled feet. More than once, having necessity to visit the infirmary in the night, I found the bed covers very damp; this was the result of the evening washings which were completed at bedtime. I complained against this abuse several times to the commander, but to no effect."

"At Hong-Kong, where the hygrometer showed 100° of moisture, two wet scrubbings per week were made below."

The editor of the *Gazeta Medica* after closing his extracts from Dr. Galdino's report, of which I have here introduced only a small part, quotes at some length, from an article published by Dr. Silva Lima in 1876, on Beriberi, which is in complete accord with the views of the Brazilean surgeon. The following is the closing paragraph.

"It is well understood that these conditions," (humidity, bad ventilation, overcrowding, etc.,) "do not constitute the cause of Beriberi; but whatever this may be, they very effectually favor its activity."

The editor states that, "in Bahia he has at different times seen true epidemics of Beriberi, which limited themselves preferably to seminaries, the house of correction, barracks and war ships stationed in the port." "In Pernambuco it was in the house of detention that circumscribed epidemics were most frequently observed. In India, also, grave epidemics of the disease occur in the prisons." In relation to Beriberi in the prisons of Japan, Dr. Simmons makes the following observation:

"Although Beriberi in India is particularly grave in the prisons, it is infrequent in those of Japan, where they are simple but substantial structures of wood, with the best possible ventilation, whilst in India they are of stone, and are damp and badly aired; the humidity is, in my opinion, a powerful predisposing cause."

We could add, continues the *Gazeta*, innumerable observations showing that it is a fact fully confirmed by the testimony of physicians, that the crowding of individuals in damp and badly aired places, is a predisposing cause of Beriberi; we shall, however, cite merely the observations of Dr. Anderson, as given by Dr. Simmons, and made among the Japanese who lived in the docks at Yokohoma:

"Of 300 men, 70 were attacked, of whom 20 died rapidly, and 47 were sent to the marine hospiptal at Tokio. The food, clothing, or employment of these men, offered to observation nothing extraordinary; but they slept in a locality in which, by reason of the sheltered anchorage, the air was almost stagnant, and hardly 32 cubic feet was given to each man. Change of lodgement, especially that for sleeping, put an end to the epidemic."

I cannot extend this paper so as to present more fully the valuable observations of Dr. Pacifico Pereira, whose essay has extended through several numbers of his journal, and is not yet all published. It will be observed that the extracts which I have made, nearly all relate to the etiology of the disease alone.

In the July No., of the *Unino Medica* of Rio de Janeiro, a series of very interesting autopsic details of cases of fatal Beriberi, quoted from Dr. Pereira's article, are given. I must confine my extracts to only one case, as follows:

"Autopsy 12 hours after death. F. aged 36, of regular stature, well formed and muscular. Cadaveric rigidity of light degree in the finger joints; general subcutaneous infiltration, more notable in the lower limbs, in the thoracic wall, and the neck and back. Cyanosis in the face and extremities, but particularly in the lips and finger points. Large livid blotches on the ears, the neck and the arms, and strongly accentuated and extended on the back.

. . .

CRANIAL CAVITY.—The diploë of the bones engorged with dark fluid blood; an effusion of about 60 grams of serum in the cranial cavity; the superior longitudinal sinus, containing little blood, the lateral sinuses and those of the base engorged with black blood, with small coagula floating, which were easily broken up.

The vessels of the meninges generally full. In longitudinal and transverse sections of the cerebral hemispheres, a fine punctiform injection was seen through the whole thickness, most notable in the white substance. A small quantity of serosity in the lateral ventricles. In the medulla oblongata and spinalis, slight hyperæmia.

THORAX.—The diaphragm over both sides, at the the height of the fifth rib. In the two pleural cavities about 800 grammes of serous liquid, limpid and yellowish. The lungs a

little retracted in form, without any pleuritic adhesion; ashy aspect, paler on the front, darker in the back of the lower lobes, and giving out on cutting, a sanguinolent liquid, dark, and mixed with air bubbles. The bronchial mucous injected and covered with mucosity. The jugular veins a little turgid, containing dark, fluid blood. The pericardium contained about 70 grammes of transparent yellowish liquid. The heart was a little larger than normal; the left ventricle contracted; the muscular tissues of the whole organ of a pale yellow; near the vertex a notable quantity of fat. By dissection in the whole thickness, the muscular texture was seen discolored and yellowish, especially in the papillary muscles. The left ventricle, nearly empty, a few soft, dark coagula which separated readily on light pressure. The right ventricle contained a greater quantity of blood, dark and black coagula somewhat consistent. One large coagulum of about ten centimeters in extent, reached from the trabeculæ of the right ventricle into the pulmonary artery; and another smaller, from the right auricle into the inferior vena cava. These coagula, obscure and different in their superficial parts, were more consistent towards their centres and yellowish, and as if infiltrated with serosity. The sigmoid and auriculo-ventricular valves normal. The muscular texture of the heart was easily torn by the fingers.

ABDOMINAL CAVITY.—Contained about 600 grammes of yellowish, transparent liquid. The epiploon and the mesentery had a large quantity of fat. There was hyperæmia of the epiploon and the intestines.

THE LIVER, was voluminous, weighing 1600 grammes (4lb 5½ oz.), with a longitudinal diameter of 28 centimeters (11 in)., transverse 19. (7½ in.,) and its greatest thickness 10. (3 4–10 in). The surface was covered with yellow spots, more or less extensive, notably larger and deeper on the lower face. On closer examination it was seen that striæ of yellow color formed a network very fine and irregular, circumscribing small, darker points. On section there were seen on the surface of the cut, striæ and yellowish points, contrasting with the small and darker ones. The section gave a flow of dark blood, fluid and sensibly mixed with fat. The consistence of the texture was inferior to the normal; it broke up readily on pressure.

GALL-BLADDER, slightly adherent to liver, and containing a great quantity of blackish, thick bile.

SPLEEN, 15 centimeters long, 9 broad, and 5½ thick. Weight 220 grammes (9½ oz.). The surface obscure, of vinous tint; texture friable, little resistance, lacerating on pressure. The pulp of intensely violet color, engorged with dark blood.

PANCREAS, nothing abnormal.

KIDNEYS, rather enlarged; easily detached from their capsules; the surface smooth, of dark, yellow color, with yellow spots and striæ more or less extended. On dividing by a sagittal section, the surfaces of the cut were seen yellow in the cortical zone, and as if pricked with dark points, and of a paler color in the medullary portion.

THE BLADDER, contracted; a very small quantity of turbid, yellow urine.

THE STOMACH contained a large quantity of thick, dark liquid; the mucous coat was injected, and presented a fine punctuation, due to numerous very small hemorrhagic foci. In the duodenum and jejunum the mucous coat was slightly injected. The aorta and vena cava inferior showing nothing abnormal.

THE MICROSCOPIC EXAMINATION.—In the liver, hyperplasia of the perilobular and interstitial connective tissue was seen; also degeneration of the cells of the proper texture of the liver, which presented a protoplasm full of small fatty granulations. Around the vessels there were also hyperplasia of the conjunctive tissue, forming perivascular fasciculi, equally infiltrated with fat.

In the heart there was entensive fatty degeneration. The transverse striæ of the muscular fibres had completely disappeared in many fibres, and were substituted by fatty granulations; in others, the striæ were yet visible, but interrupted from space to space by the same granulations. In both the internal layers next the endocardium, and the external next the pericardium, fatty degeneration more or less advanced, was seen in the muscular fibres. In the papillary muscles the fibres were degenerated in a high degree. The large coagula met with, were formed in the center by a dense recticulation, constituted by filaments of fibrine containing discolored cells, and were infiltrated with fat cells in great quantity, and fine granulations of fat.

In the kidneys the protoplasm of the epithelial cells of the canaliculi was full of granulations the interstitial texture was infiltrated with fat cells and granulations.

In a portion of the texture preserved in alcohol, the canaliculi were seen at many points void of epithelial cells, and at other points they appeared separated and retracted. The conjunctive perivascular pyperplastic tissue was also infiltrated with granulations and fat cells. In the spleen, were seen venous hyperæmia, dilated vessels, small hemorrhagic foci, globules of blood and pigmentary cells, accumulated in groups, in greater or less number in the pulp.

THE CEPHALIC SOUFFLE.—M. R. TRIPIER, Physician to the Hospital of Lyons, has published some new researches on this subject. He believes that in certain cases a deep systolic souffle can be heard all over the cranium, but principally at the sides on a level with the temples, and with a maximal intensity over the right temporal region. It can be modified or momentarily suppressed by compression of the carotid of the auscultated side or even of the opposite. The patients with whom it is observed themselves hear the intermittent bruit. It is most probably produced at the terminal part of the carotid artery, where it enters the cranium. It is most frequently met with in cases of anæmia produced by hemorrhage or cachexia, and in chlorosis; and where it is heard without any bruit at the base of the heart, and especially where it is heard without anæmia, there should be a suspicion of pressure from intra-cranial tumor.—[*Revue Médicale.*—[*Dublin Journal Med. Science.*

Original Lecture.

Article XXVI.

Puerperal Eclampsia. By G. M. B. Maughs, M. D., Profesor of Obstetrics and Gynæcology, in the Missouri Medical College at St. Louis.

The subject of this lecture is puerperal convulsions—eclampsia puerperalis. This is one of the most dangerous accidents that invades the lying-in room. The affection is peculiar to the pregnant condition, and may happen during the latter stages of pregnancy, during labor, or immediately after labor, during the puerperal condition. The affection has been divided by authorities, into epileptiform, hysterical and apoplectic convulsions.

None of these belong to eclampsia puerperalis, it is a disease *sui generis* and belongs of course to the essential conditions of the lying-in-child-bearing woman. Its causes have been the matter of much research and controversy. It was supposed by the older writers to be an apoplectic seizure, the result of congestion of the brain; but after the discovery of Lever and Frerichs, of albumen in the urine in connection with eclampsia, it was supposed to be the result, not of albuminuria, but of the presence of urea in the blood.

Braun, noticing that albumen in the urine was nearly always associated with eclampsia puerperalis, as it is in Bright's disease, supposed that Bright's disease was the cause of eclampsia. Halbertema supposed it to be the result of urea in the blood simply, without attributing it especially to Bright's disease, the two conditions of albumen in the urine and urea in the blo d, being as he supposed, the result of pressure of the uterus upon the ureters.

As before stated, Braun supposed the etiology of the puerperal eclampsia was very clear in that it was Bright's disease of the kidneys; but numerous observations demonstrated the fact that three were many cases of Bright's disease of the kidneys without

any eclampsia, and that some cases of eclampsia were attended with no evidence of Bright's disease of the kidneys. It was clearly demonstrated that in a great many cases, there was no albumen in the urine, and that while very frequently there was found albumen in the urine, and therefore urea in the blood it was supposed to result in these cases from uræmic poisoning. Then again it often happens that we have albumen in the urine without eclampsia. Yet the two are very intimately associated, inasmuch as it is the law, that if we have no albumen in the urine previous to the attack, we nearly always have it after the attack. So that the two are intimately associated.

The albumen in the urine, and the urea in the blood have been supposed to result from the same cause as the convulsion, or else the albuminuria produces the eclampsia; or else the eclampsia produces the albuminuria. So that it is not possible to say which is the cause, and which the effect. Most probably both are dependant upon the blood state.

The premonitory symptoms of the attack are important. It will be found in almost every case, upon a careful examination, that there is œdema of the eyelids and upper extremities. Œdema in the pregnant woman is usually in the lower extremities; here it is common in the pregnant woman, and is a result of the pressure upon the pelvic blood-vessels, preventing the return of the venous blood from the lower extremities; but œdema of the face and upper extremities in the pregnant woman, is a symptom of more gravity, for there is generally a condition of albuminuria. With œdema of the upper extremities we have, not unfrequently, a disturbed vision, flashing of light, mists floating before the eyes. These are often associated with serious headache, some impairment of hearing and nervous disturbance. These symptoms would be of great importance, and should lead at once to an examination of the urine. Indeed, if the pregnant woman complained of these symptoms, it would be criminal neglect not to at once examine her urine.

A very ready test of the urine to discover the presence of albumen is to take a small quantity in a test-tube, and pour some nitric acid down the side of the tube. As it is heavier than urine, it will immediately run down to the lower side. Upon looking at it, you will see the lower portion, pure, nitric acid, in the upper part pure urine, and if there is albumen, the middle is

cloudy. If you shake it, it becomes cloudy throughout the tube. If you place such urine in a test-tube and heat it, it will in severe cases, become cloudy,—semi-solid—coagulated. In lighter cases, flakes of cloudy albumen will be found throughout the tube. If you find albumen in the urine, you will treat the patient as previously, instructed for albuminuria. Or the patient may, without any of these premonitory symptoms, have a violent eclamptic seizure at the beginning of, or during labor. Or, she may at this time be seized with apoplexy or epilepsy. It would be improper to call either of these conditions apoplectic or epileptiform eclampsia. Neither of these diseases have any relation whatever to eclamptic apoplexy, while a convulsive disorder may happen without any convulsion at all, being a paralysis from the beginning.

Epilepsy, the type of convulsion, might in a simple attack, be mistaken for eclampsia; yet is a distinct disorder, and has a different history.

There is this difference of diagnosis: A woman may have an epileptiform seizure without having had any previous attack, and she may have none afterwards, though this is unusual; whereas, the eclamptic convulsion has not been preceded by any other, and will repeat itself immediately. The attack then may be ushered in witnout any premonitory symptoms. It happens that the vost majority of these cases happen during labor; of three hundred cases, two hundred have occurred during labor. Fifty perhaps, happened in the last stages of pregnancy, just preceding labor. Fifty more, in the puerperal condition, after labor. The seizure is one of the most frightful phenomena that can present itself, alarming the attendant himself, unless he is prepared for the occasion. The attack generally presents itself in this way: first, there is a tonic spasm of the chest, with a fixedness or rigidity of the muscles of the face and chest, and a startling appearance of the face, which is drawn gradually to one side, either the right or left. Most generally it is to the left side, and associated with a sardonic grin. The whole chest is fixed, and the body is extremely rigid. In this stage of tonic spasm, a condition of opisthotonos—a bending of the body back upon itself— may occur.

The patient presents a most horrid appearance, with the tongue protruded and swollen, and it is probable that the tongue

may be injured in this stage. This spasm is an irregular contraction of the muscles of the whole body, in which the patient is horribly distorted. The violent closing of the jaw may lacerate the tongue, and frothy, bloody saliva may be discharged from the mouth. The tonic stage of the attack lasts about half a minute. Fortunately it does not last longer, or the patient would die from the state of rigidity. Whereas, the clonic spasm may last five or ten minutes, most generally three or four minutes, when the, patient recovers from the attack of spasm and becomes quiet. This calm condition of the patient is most gratifying to the observers who suppose all is over; but in most cases it will be rapidly succeeded by a second attack. The patient may have one or two, ten, fifty, or sixty, or even more, of these attacks following in rapid succession, until she finally succumbs, worn out by the violence of the attacks, and the exhaustion attending them. If the attack has been slight, the patient may partially recover her consciousness after it has passed off, but most generally she remains in a semi-consciouscondition, complaining of headache, or seemingly conscious, she remains with more or less mental hebetude during the interval before another attack succeeds. It is a favorable occurrence, if the patient regains consciousness and rouses herself fully from the effects of the first attack. Generally, if it has been severe, she remains in a semi-conscious, semi-comatose condition during the interval to the occurrence of another attack. During the attack, no matter how long it lasts, the patient is in a state of oblivion. If she recovers after the lapse of a week, she will not be conscious of anything that transpired, will not know of anything that happened. Even though she seems rational and conscious during the intervals of the attacks, when she recovers from these convulsions, the time is a perfect blank in her existence.

Some time since, I saw a case with Drs. Guhman and Cooper, of a young woman, a primipara, who was siezed with an eclamptic attrck. She was treated very properly for five, six, or seven days, when I was called to see her, and deliver her by embryotomy. I delivered her on Saturday, and she was perfectly unconscious until the next Saturday, when she so far recovered herself, as to ask what her condition was. She was told that she had been delivered some eight days previous.

There were two weeks in her life that were an entire oblivion. For a whole week after her delivery, she was entirely uncon-

scious of the fact, had no possible remembrance of it. The attack as I said, occurs generally during labor; during the dilation of the os, or during the pressure of the head of the child upon the painfully distended perineum. If the attack commences previous to labor, it generally brings on labor prematurely. If labor has not commenced at the beginning of the attack, it is almost certainly induced, as the woman is nearly always delivered before she recovers from the puerperal eclampsia. The prognosis in these cases is exceedingly grave. As I stated, it is one of the most formidable accidents we meet in the lying-in chamber; not only frightful in its violence, but absolutely dangerous. The prognosis is very grave, concerning both mother and child.

Ramsbotham congratulated himself, that only one in three patients died of this malady, under the improved treatment in his day. It is supposed now than one in eight or ten die; still this is a formidable thing, when one in ten die. The child very often dies. It dies during the violent convulsions of the mother. They are supposed to cut off its respiration through the placenta by the disturbance of the circulation during the violent spasm of the mother—the uterus participating in the spasms. These eclamptic convulsions resemble the convulsions of childen in their appearance. The mother's life is jeopardized the child's life is seriously endangered. Each convulsion threatens to cause the death of the mother. It may be that the tonic contraction during the early manifestation of the convulsion, causes a state of rigidity of the respiratory muscles, and the woman may perish of apnœa—want of breath, Sometimes death is from an apoplectic effusion—extravasation—in the brain. The pathology of the disease is intimately associated with its etiology. It was not until after the discovery by Lever and Frerichs, that there was albumen in the urine in these cases, that it was supposed to be due to albuminuria. Braun supposed it to be caused by Bright's disease; but that was very soon proven not to be the case. Then it was supposed not to be due to Bright's disease, but to the pressure upon the ureters interfering with the free discharge of urine from the kidneys, the retention of urea in the blood, and this is doubtless true, in, part, as it is a fact that the pressure of the uterus upon the ureters does interfere with the function of the kidneys and renal vessels, roducing hyperæmia, of the kidneys and retention of

urea in the blood. Now this is evidenced by the fact that it is nearly always primipara who have this. In eight cases out of ten it occurs in women in labor with the first child. It is with the first pregnancy that the abdomen is most tense and the pressure upon the ureters and renal vessels would be the greatest, thus showing the intimate relation between primipara and the occurrence of puerperal convulsions. But eclampsia is, doubtless the result of the peculiar blood state and the condition of the nervous system, belonging to and essentially connected with the child-bearing woman.

The pregnant woman will have an excess of waste material in her blood. The process of decay going on in her system and that of the child's, loads the blood with the excrementitious materials of her own system added to that of the child, so that she has her blood deteriorated to a very great extent during pregnancy. Such a woman has the blood loaded with an excessive amount of wasted matter, excrementitious material, then she has added to this an impoverished or watery condition of the blood. hydrohæmia, then she has added to that, hyperinosis. Now formerly it was the practice to bleed pregnant women and the necessity for this was considered proven by the appearance of the blood which always gave a buffy coat, and the buffy coat of the blood was taken as a mark of an inflammatory state of the system and this was argued to prove the necessity of blood-letting.

It is now well known to be the result of the presence of an excessive amount of fibrine from the necrobiotic processes going on in the system of the child, and that of the pregnant woman. It is the result of an excessive amount of fibrine, and a diminished amount of albumen in the blood, so that the blood state in the pregnant woman is peculiar. We have hydrohæmia, hyperinosis, excess of fibrine, leucocythæmia, excess of white blood corpuscles, diminution of the red blood corpuscles. Then we have in this condition of pregnancy an excessive excitability of the nervous system. The nervous system of the pregnant woman is in much the same condition as that of a child. It is in a state of great excitability.

She is always in a state of emotion and her nervous system is subject to jars and shocks from slight causes. In pregnancy probably, her nerve force is absolutely diminished, but it is in a state of excessive irritability because of the blood state. This

is particularly the case in primiparous patients, and as before stated, eclampsia nearly always happens in primipara. Doubtless the vicissitudes of the atmosphere has an influence on pregnant women. This connection of the atmospheric condition with puerperal convulsions, was mentioned by the elder, and confirmed by the younger Ramsbotham, and also by Barker and others. There is no doubt that eclampsia is epidemic under some particular conditions of the atmosphere.

The elder Ramsbotham says it prevails when there is thunder in the air, and is true. It does prevail when the air is surcharged with electricity. That is exactly when it would be likely to occur, as when there is an excitable condition of the nervous system, a liability to convulsive seizure would be greatest in this state of the atmosphere. Some patients measure the amount of electricity in the air almost as well, and as readily as an instrument would do; as do hundreds of neuralgic and rheumatic patients measure the amount of moisture in the atmosphere almost as certainly as an hygrometer would do. So that we are intimately associated with our surroundings, and influenced by them. Exceedingly excitable persons, such as the pregnant woman, where the nervous system is exceedingly excitable, are liable to have an explosion on the slightest cause, and measure the amount of electricity in the atmosphere. So that you may have as shown by Barker, ten or twenty cases of puerperal convulsions occurring in a given locality in a single day, and then not have as many again during the entire year. We may readily see that in consequence of these intensified external conditions of the atmosphere, almost every pregnant woman of an excitable temperament in the city, might have puerperal convulsions. I have no doubt of its being associated with atmospheric changes. The most interesting is the Traube-Rosenstein pathology of eclampsia. These suppose that with the blood state given, together with hypertrophy of the left ventricle, present in pregnancy, we have first an increased pressure in the arterial system; this is intensified during a pain causing hyperæmia of the brain. This on account of the hydræmia causes œdema. This œdema, again, causes consecutively anæmia of the brain. The effect of this anæmia, is an eclamptic seizure.

Now the treatment; and this is the most important to you as physicians. It is of infinite importance to the well-being of the

patient. It does not concern the patient what theory you may entertain as to the etiology or pathology of the malady; that concerns your intelligence; but your treatment of it, does concern her well-being and is, therefore, of the utmost importance to the patient who is of all in the world, the most interesting. It concerns the well-being of the woman and her offspring, as both are likely to perish if you are ignorant of the manner of relieving her. And then it is just one of those occasions which are most trying to the practitioner on account of the suddenness with which it makes its appearance, and then it is unlooked for, and we are not prepared against it. It creates an amount of alarm in the lying-in chamber which nothing else can, so that if the doctor is unable to control himself, he adds to the disorder and confusion around him.

Ramsbotham congratulated himself upon the improved treatment in his day. It was supposed that the disease was an apoplectic seizure or of that nature, and that it resulted in congestion of the brain, and, therefore, the lancet was the remedy; this advanced treatment and great saving of human life was by a universal resort to the lancet, and he does so very properly. He had improved the treatment over that of Humphreys. About one patient in three or four died, about from thirty-three to twenty-five per cent. of eclamptic patients died under the advanced treatment—the use of the lancet. After the discovery by those later pathologists of the frequent connection of albuminuria and puerperal eclampsia, the connection of these were taken as evidence of the connection of puerperal convulsions and Bright's disease of the kidneys, and of course the lancet was rejected. Nobody thought of bleeding for an advanced condition of Bright's disease—an organic wasting disease. The treatment was rather to build instead of reducing the patient, therefore, the lancet was rejected; and during Cazeau's tim , the lancet was everywhere laid aside. So we see the pendulum swinging too far to the opposite side.

Later again we see practitioners resorting to the use of the lancet. Some modern physicians it is true, have rejected the lancet. You constantly see such remarks from such authors as Playfair, and others; that the treatment has been greatly improved, and the mortality is greatly lessened by the non-universal resort to the lancet. Now there are so methings in the teachings of great men, that it is difficult to account for. I have

pointed out a number of such to you that seem to be without any possible logic, or logical sequences, and this is one of them. Ramsbotham and the older physicians bled greatly, and repeated the bleeding because they had no other resort. They are not to be blamed for the use of the lancet, because we in this day have other remedies that we can sometimes substitute and bring in as a part of the treatment. It does not follow that their treatment was incorrect, simply because we have other remedies at hand to assist us; and it does not follow that we are not to resort to the lancet because we have other remedies, not at all. Such a conclusion is utterly illogical. Suppose then, that we have a woman in labor, for it is during labor that it usually happens, suppose we have such a patient taken with an eclamptic seizure, contraction and other evidence of eclampsia what are we to do in the case? Now, we have several theories upon which we justify the treatment by blood-letting. The Traub-Rosenstein theory is that puerperal eclampsia was the result of urea in the blood, and albumen in the urine. Of course albumen in the urine, and urea in the blood, produced an impoverished state of the blood—produced hydræmia; and the theory was, that the blood was greatly impoverished—watery; that increased vascular tension is always present during pregnancy, and that during labor the muscular contraction increased the arterial tension and that owing to the impoverished condition of the blood, the increased arterial tension—the vascular force—we have hyperæmia of the brain. That is one of the necessary conditions attending labor. Hyperæmia of the brain produces œdema of the brain; an effusion of water into the brain tissue, and this œdema by pressure on the capillaries and blood-vessels, produces anæmia of the brain through the central portion of the brain. But the convulsions are not the result of œdema directly, or of hyperæmia, or of hydræmia, not at all, but of anæmia.

Let us suppose this theory to be correct, we will find it does not militate at all against the use of the lancet. The first thing to be done, I would urge in an ordinary case of puerperal convulsions happening during the latter stage of pregnancy, at the beginning of labor, or during the progress of labor, the first thing to be done is to have free blood-letting. It has been abused because it was the only resort. I have bled a woman for these convulsions, and if the convulsions reappeared, I was com-

pelled to bleed her again, because I had nothing else to substitute for it; there was no possibility for doing otherwise. If a patient is taken with eclamptic seizures, bleed her. Some thirty years ago I was called in consultation to see a young woman in labor with her first child, when she was taken with an eclamptic seizure. All were alarmed. The physician in attendance scarcely less than the friends. I opened a blood-vessel in each arm and bled her during the convulsions. Perhaps this is not always the best method, it is not always necessary to do so, and often it may be better to simply prevent the patient doing herself an injury during the attack. Prevent her injuring her tongue, and have some attendants to see that she does not fall off the bed. She is not likely to do so, however. She should not be held down, and no effort should be made to restrain the muscular movement, simply prevent her from injuring herself. Or in violent cases you may do as I did, immediately open a vein and bleed her abundantly, almost to syncope. Make a strong impression upon the system; young women, as a class, are most liable to these seizures, women of short stature, heavy set young women, of coarse fibre, short neck, and plethoric appearance; these are most liable to have puerperal convulsions, yet the thin, delicate, emaciated may have eclampsia during the pressure of the head upon the perineum. So then you bleed the patient freely until the lips become pale, and the pulse weak; make an impression upon the arteries and heart's action.

Well now, we bleed these patients for this reason; first, to relieve the congested condition of the brain, and to relieve the excessive action of the heart and arteries, to relieve the tension. Ordinarily we bleed such a patient very freely—from 30 to 40 ounces. Bleed her until you make an impression, and relieve the congestion of the brain. Bleed them on the Traub-Rosenstein theory to relieve the œdema of the brain. If the Traub-Rosenstein theory be correct, this is necessary, and if not, it is more so. If such a condition as Traub-Rosenstein describe exists, the lancet is absolutely necessary. The objection that these pathologists make to bleeding, is that the vessels are refilled with blood more deleterious than before the bleeding. Well we bleed the patient and relieve the brain, and the arterial tension. The Traub-Rosenstein pathologists admit that we relieve the convulsion, and that is just exactly what we want to do. Bleed

but a single time, and bleed boldly. Now we have bled the patient to relieve the congestion of the brain, to relieve the tension of the heart and arteries, to relieve the congested condition of the lungs. We have withdrawn a large quantity of blood from the system. Now we will purge the patient very freely. If she is conscious we will give her ten grains of calomel, and, ten grains of jalap—give a hydro-cathartic. But very possibly she may not be in a condition to take this, usually the patient is unconscious, therefore, we are fortunate in being able to purge her without her being conscious. And now we will give her ten grains of calomel and one grain of elaterium, make this into four doses so that we have a quarter of a grain of elaterium in each dose. We now place this on the back part of the tongue and it will readily pass into the stomach without any voluntary effort on the part of the patient. In half an hour we repeat the dose, and continue to repeat it every half hour until the patient has taken the four doses, or a whole grain of elaterium. This will produce an abundant watery discharge. But suppose the eclampsia still comes on, what are we to do? Well, the older physicians would have bled her again, because they had no other remedy. Fortunately for us, we have. Now we have bled her and purged her, but the convulsion still persist. We now use anæsthesia—chloroform. We give the patient chloroform, get her under its influence and keep her in this condition during the threatened return of the convulsions; give it as we give it in labor; give it whenever the convulsions threaten to return; do not keep the patient under its influence all the time. But possibly there comes a time when we cannot continue the chloroform, now we resort to the hypodermic injection of one-quarter, or one-third of a grain of morphine. If the patient has not been delivered, if the convulsions occur during the period of labor, deliver her if possible. If the convulsions occur during, or before labor, they will probably disappear after the delivery. If you can deliver her do so. If it is a difficult labor, introduce the forceps and deliver her.

In the case that I saw with Drs. Guhman and Cooper, the woman had been in labor several days, and the child was undoubtedly dead. There was a suppression of urine and the woman was in a comatose condition. The patient must necessarily die unless something was done for her, and the only thing that we

could possibly hope would relieve her was to deliver her. We accordingly did so by embryotomy. If the patient be in the later stage of pregnancy and the convulsions occur, bring on premature labor—empty the uterus. I have met with but one case of puerperal eclampsia occurring after labor. I remember a case of a lovely young woman whom I delivered of her first child, the labor progressed as usual and some hours afterwards the patient fell asleep and awoke with an eclamptic attack. I remember she had lost very little blood during the labor. I let this patient die, but I am satisfied if I had bled her 30, 40, or 50 ounces, she would not have died. So then in these cases, bleed your patient, purge her, give chloroform, and if the attack still persists give hypodermic injections of morphine, and relieve the uterus by delivering the woman.

Proceedings of Medical Societies.

Article XXVII.

ST. LOUIS MEDICAL SOCIETY.

Taken by the Journal's Stenographic Reporter.

Saturday, Dec. 3rd., 1881.

Nasal Calculi.

Dr. Rumbold.—Mr. President; on last Saturday evening, in my remarks on the formation of cretaceous masses in the nasal cavities, I stated that their growth was comparatively rapid. I had, at the time, in mind the history of a patient that first came under my observation in 1873. Shortly after this first visit, I removed a piece of bone which proved to be a part of the right antrum of Highmore. I here present it it to the Society. In January 1875, I removed a mass of cretaceous matter from the same locality. It is in this box which I will pass around to the members. In July 1876, I removed another cretaceous mass from the same place, which is in another box. It is seen that they are both about the same size and shape. I stated last Saturday that the masses would weigh nearly two ounces. I now see that I have written down their weight as four ounces. I find that I have still other masses of this cretaceous matter taken from the same patient, all of which goes to prove a very rapid growth. This was removed in December 1876.

Dr. Pollak.—How did you get them out?

Dr. Rumbold.—Through the nostril. The septum of the nose was destroyed, the turbinated bone was partially destroyed, also, so that they could be grasped by an instrument quite readily.

Dr. Pollak.—Was it a syphilitic case?

Dr. Rumbold.—Yes sir!

Dr. Porter.—I have, not in my posseasion, but within my

knowledge, a most interesting specimen, a foreign body which was removed from the nose of a gentleman of this city. He had chronic discharge from the right nostril, and had been well treated by others, and when I examined him I could not see why he had not gotten well; but on watching the case a little farther, I found that it did not answer to the usual methods of treatment. There was a great deal of irritability on the right side, and in the right nostril. To make a long story short, one day he discharged from the antrum, there is no doubt now of the locality, a little mass which was found to be an embryonic tooth that had been pushed into the antrum, and had doubtless remained there many years. This gentleman said that he had this discharge since boyhood, and he is now 36 or 37. The discharge of this foreign body completely relieved him. It was a unique case in my experience, and to me a very interesting one.

Asthma from Nasal Polypi.

DR. MULHALL.—I have an interesting case to present, not so interesting from its objective signs, as it is for the relationship between these signs. The case is one of asthma, dependent, as I think, on nasal disease, gelatinoid polypi. I have not touched the man's nose yet, so those who wish to examine him, may see the case in its entirety. The history of the case shortly is this: The man is 43 years old and married, has never had any serious illness, and has not been more susceptible to cold than other people. In December 1880, he noticed a watery discharge from both nostrils, and nasal respiration became gradually impeded. Two weeks afterwards, immediately after lying down one night, he felt his throat obstructed and began to cough and have labored breathing, expectorating small quantities of foamy mucus. He arose and getting into the asthmatic position, had some relief. This state of affairs continued for a month when he sought treatment. He informed the practitioner that his nose was stopped up. This gentleman ordered him a snuff and some medicine internally, neither of which gave him any relief. Indeed, though he consulted another practitioner, and took many medicines, he experienced no relief whatsoever from his asthma until May. On questioning him, he now is sure that before relief came to him with the summer season, the nasal respiration became freer, his chest symptoms vanished, and in three weeks he was perfectly free from trouble, and remained so until August, having

meanwhile regained 40 pounds in weight that he had lost. In August his nose began to discharge watery mucus, in three weeks his nose was again almost occluded, and his asthma reappeared. Since then he has had asthmatic seizures by night, as well as by day, although he has been the patient of an eminent practitioner who prescribed many kinds of treatment for him, but as formerly, without the slighest alleviation of his symptoms. At any moment of the day or night that he assumes the recumbent posture, he at once has his suffocative signs. The seizure he knows is coming by the dryness of the tongue and fauces, and a sense of constriction at his larynx. For the last three weeks he has, at no time been able to take a deep breath on account of the pain it gives him about the false ribs and upper abdominal region, and for the same time he has suffered with headache day and night, in the frontal and occipital regions, being worse in the orbital region. All his symptoms are intensified at night. He is never able to pass his water during an attack, and it takes him fifteen minutes to pass it after an attack. Indeed, any time during the last three weeks, he has not been able to pass his urine in less than fifteen minutes. I thought this would be a very interesting case, because, in searching up the literature on the subject I found that asthma with nasal disease as the reflex cause, has attracted very little attention. In the United States there exist but two papers upon the subject; one that was read at the Missouri Medical Association meeting this year; it appears in the report of the transactions for 1881. Dr. Todd of St. Louis, read his paper with the account of a case, in which asthma was caused by a large growth in the retro-nasal portion of the nose, and he cured the asthma by removing the growth. Dr. Wm. Porter of St. Louis, has a paper on the subject in the *N. Y. Medical Record* for November 1879, with details of a case in which a cure of asthma followed the removal of nasal polypi. Fraenkel read a paper before the Berlin Medical Society, published in the *Berliner Klinische Wochenschrift*, in January 1881, in which he says that up to his time, no regular paper had been written upon this subject. It is an extensive paper in which cases are cited, and in it he says that he was the first to draw attention to the connection between nasal diseases and asthma, in 1871.

I propose to remove the growths in this case, and then to present the man again to the Society.

DR. PORTER.—Asthma is not a disease, it is rather a symptom of disease. It is a bronchial spasm and may be due to local change in the tubes or to reflex irritation. Possibly of the latter class there is no kind of reflex irritation that produces more persistent, or more distressing asthma than irritation along the upper respiratory tract.

I do not like to cite cases that I have published elsewhere, but as they have been mentioned by the doctor, I will refer to some of them. The cases were published in the *New York Medical Record* two years ago. The first was that of a well-built, middle-aged man without any vices, and without hereditary taint so far as I could learn, who had persistent asthma. His paroxysms were very much worse at night, a little worse in cold weather. Upon examination I discovered that the nasal cavity was crammed with small polypi. The mucous track was very sensitive, so that the inhalation of irritating substances, immediately caused asthma. The introduction of a small cotton-covered probe, touching these polypi caused a severe paroxysm; and as at that time, there had been no recorded cases, except the case which formed the basis of the paper published in Europe, I was unwilling to say that the polypi were the cause of the asthma, but my experience with this case taught me so. Of course one of the first things to do, aside from the general treatment of the case—I did attempt to treat it by the treatment usual in asthma—was to remove the polypi. I tried to remove them with chromic acid, and the introduction of iron, but that gave rise to so much pain and irritation, that I resorted to the use of the ordinary forceps and so removed them. I did not cauterize the base, and here comes an interesting point; as soon as the polypi were removed the asthma disappeared entirely, and for probably three months, there was no return. They reappearded, and with them the asthma returned. Willing to test the case further, I removed them again, but did not cauterize the base. The polypi reappeared and the asthma returned; the matter was now fully tested and the next time the neoplasms returned I put a strong solution of chromic acid all over the mucous membrane upon which they grew. There was no return of either the polypi or asthma. Although the bronchial symptoms were fairly well marked, such symptoms as we generally find in a case of somewhat recent asthma, they disappeared directly when the polypi were removed. I am told that ther

has been a return of asthma in this case, probably because of further developement of polypi.

In an other case there was a very irritable tonsil, and though not suspecting than the tonsil had much to do with the asthma, I suggested its removal. In cutting it off my guillotine struck something hard and I found a small calculus embedded that had caused the obstruction to the knife; when it was removed the symptoms disappeared. Still a third case was one in which there was an irritation from the ovary. I saw the lady in consultation with a practitioner in the city, who already suspected the exciting cause; when that was relieved, and the irritability was removed, the lady got well. I have since then met with another case in which the symptoms all disappeared.

There is in all these cases one very important point to be remembered, I don't mean to say in these cases only, for they are almost too rare to form the basis for a conclusion, but in all cases of asthma, from reflex irritation, relief may generally be obtained by the removal of that irritating cause; yet not always, because when of long continuance, on account of local changes, the irritability of the mucous membrane will continue after the exciting cause has been removed. I think Dr. Mulhall will find when these polypi are removed, that there will be great relief, but it may not be complete.

DR. RUMBOLD.—In 1869 I reported to this Society the removal of a number of nasal polypi by injections of astringent preparations of iron, such as the perchlor. and persulph. of iron by means of a hypodermic syringe. I gave the history also of a patient whose asthma, of two years standing, had been relieved by the removal of some ten or twelve nasal polypi by the hypodermic syringe. His relief lasted for several months. I stated, at the time, that the removal of the polypi gave him some relief from the irritation arising from the chronic catarrhal condition of the mucous membrane of his nasal passages and that the asthma was due to this chronic inflammation and not to the presence of the nasal polypi. All that these growths had to do with his asthma was that they gave rise to a greater than usual irritation, and that this irritation caused the asthma, and that I thought the asthma would return if the chronic inflammation was not reduced to some extent.

We have patients afflicted with asthma who have not a single

polypus, but we *cannot* have a single case with nasal polypi unless chronic nasal catarrh has been existing *for a long time.*

In 1879, Dr. Fischel read a paper on "the treatment of asthma by the Waldenberg apparatus;" at that time I stated that I had relieved attacks of asthma by the removal of nasal polypi; I also stated at that time, that I believed that attacks of asthma were due to an irritation arising from chronic nasal inflammation. This is my present belief which I have stated in my work on "The Hygiene and Treatment of Catarrh." pp. 404-411.

DR. FISCHEL.—I don't know anything about the case brought here this evening, but I am inclined to agree with Dr. Rumbold in his views that nasal polypi do not often bring on attacks of asthma. I have in mind now one case, and I think possibly that it is the case which Dr. Porter has referred to this evening. The gentleman had been under my care for a long time, and at tmes I thought that he was being materially benefitted with Waldenberg's treatmemt. He said Dr. Porter had examined his nose, and found, as I found, that he had polypi. Dr. Porter removed the polypi. But I am quite sure the patient was not cured of the asthma. I don't think I have ever seen a case of asthma where there was not nasal catarrh connected with it; and I think that the history—the etiology of the trouble bear me out in that. It is possible that the nasal polypi are the result of catarrh, and not that asthma, is the consequence of the polypi. Of course the polypi by obstructing the nose would increase the trouble, and they should be removed; but I am inclined to believe that their removal will not cure the asthma.

DR. MULHALL.—I will say there is no history of asthma, or nervous trouble, and I took his history very carefully with regard to nasal catarrh, and he states very positively that he had no discharge or any symptoms of nasal irritation before the time stated. Asthma is of course only a symptom; I think all the authorities that I have read, state that in the majority of cases, the cause of the asthmatic disease is within the chest; and from what I have seen of asthma, it seems to me that in the majority of cases, the primary disease is in the chest. As regards his being cured by the removal of the polypi, it will be remembered that I stated in the history, that he was cured by the warm weather, because the warm weather removed the polypi, the watery secretion was

dried up, and they shrivelled up so that the nose became perfectly free, and he gained in three months forty pounds which he had lost. He did not have the least symptom of irritation of any kind during the continuance of the warm weather. I have examined his chest very carefully, he has physical signs of emphysema; he has slight bubbling râles in the larger bronchi in the lower part of the chest; anteriorly above, there are no morbid chest sounds, except prolonged respiration. I think the history of this case without physical investigation, would at once have told one that the asthma was connected with the nose. He has a watery discharge from the nose, and in the course of two weeks, the nose is almost completely occluded, and then the asthmatic symptoms come on. Later his nose becomes free, and his asthma disappears. In August the watery discharge from the nose again makes its appearance, the nose fills up and the spmptoms of asthma return. It seems to me that this is surely a case of asthma caused entirely by nasal polypi.

DR. RUMBOLD.—The fact that Dr. Mulhall's patient was better during the summer months, at the time in which catarrhal inflammations would be improved, and the polypi be shrunken, is evidence that both the polypi and asthma are due to the catarrh.

DR. MULHALL.—I think an examination will show that he has not got catarrh now.

DR. RUMBOLD.—I am positive that he has nasal catarrh now, the presence of the polypi are the proof of it; the polypi are the result of long continued catarrhal inflammation.

DR. HUGHES.—It doesn't occur to me that in seeking to explain the possible modus operandi of reflex action from the nasal cavity upon the diaphragm, one should circumscribe the irritation exclusively to the nasal pedicle of the polypus. Now in those instances where the polypi are the sources of irritation, there is more or less diffusion throughout the whole nasal cavity. While we may not agree in particular cases as to the fact that asthma is produced in this way, I think there can be no doubt that we have reflex asthma from an irritation of the nasal cavity. I think that Ramey's explanation of the contiguity of the origin of the cranial nerves in the floor of the fourth ventricle and medulla, will explain the possibility of nasal reflex irritation, as in the physiological act of sneezing, quite satisfactorily. I have

seen cases of asthma without any irritation of this kind in the nose; and I have seen cases of asthma that recovered in spite of the irritation of the polypi in the nasal cavity.

DR. A. GREEN.—I agree with Dr. Porter, that asthma, is in a great many instances, only a symptom. By "asthma," we usually mean periodical attacks of dyspnœa, with perfectly free intervals, attacking individuals not affected with any pulmonary or heart disease, of which it is so often a symptom. As science progresses, we may probably find what we now consider a neurosis of the vagus nerve, without, any pathological anatomy, is really due to some anatomical lesion, and then asthma will cease to be an idiopathic disease, and be only a symptomatic one altogether, but not so in the present state of science.

By catarrh we mean a superficial inflammation of the mucous membrane, with hypersecretion, as a result of the hyperæmia, which is either active or passive, a fluxion or stasis. The mucous membrane and its glands do not perform their function, they do not secrete at all for a while, or, which is usually the case, they secrete too much, and the secretion itself is not a physiological, but a pathological one. It may be caused by a cold or not. If a patient says: I have no cold, it does not follow that he has no catarrh; because he may have no cold, and still have a catarrh.

The glossopharyngeus, spinal accessory and the pharyngeal branches of the vagus, supply the superior and middle constrictors, and the mucous membrane of the pharynx, even the superior laryngeal supplies the inferior constrictor. How far is it then from the posterior nares to the mucous membrane of the pharynx? And does not inflammation extend by continuation of the same tissue? We should therefore not consider it strange when nasal polypi and catarrhal inflammation of the nose, under certain conditions, give rise to asthma, which is considered to be a neurosis of the vagus nerve.

DR. HURT.—I have been in the habit of distinguishing two classes of asthmatic trouble; the dry asthma, in which the mucous membrane, as far as it can be seen, and all the symptoms, indicate a deficiency of secretion; and the moist asthma, in which there is an excessive secretion of mucous. To say that asthma does not originate in a catarrhal affection, would be contrary to my observation. The disease called hay fever, or hay asthma is almost invariably attended with a catarrhal condition of the nasal

passages; and I have seen some as severe asthmatic symptoms in hay fever as in any other form of asthmatic trouble. My opinion is that, whether it be a simple neurosis, or whether it originates in a catarrhal condition of the mucous lining of the respiratory mucous membrane, there is always more or less blood stasis. Even in the case of a simple nervous asthma, the condition of the mucous membrane would perhaps be analogous to the condition of the skin in some other diseases that are known to be due to irritation of the terminal branches of certain nerves, as herpes, for example.

DR. JOHNSTON.—Do you think that polypi produce asthma?

DR. HURT.—I should think they might; at any rate, the same cause that produces the polypus is competent to produce an asthma, irritating and congesting the mucous membrane; and I believe it is possible for obstruction of the nasal passages in some very susceptible persons, to cause asthma; but that would not be the case in all individuals. Many persons have nasal polypi who do not have asthma.

SATURDAY, Dec. 10, 1881.

Laceration of the Os Uteri in Labor.

DR. ROWLAND.—I will report a case which may be of some interest. About four weeks ago I delivered a delicate lady of rather small stature, and weighing less than a hundred pounds, of a comparatively large male child—it weighed between 9 and 10 pounds. She had enjoyed pretty good health during gestation, better than previously. The labor was protracted; she was in labor some fifteen hours, the expulsive pains being pretty hard. The presentation was natural, the first position, vertex presentation. Nothing unusual occurred in the case until just as the child's head was born, or rather, just before it was born the woman complained of more than usual pain. Such was the distension of the soft parts, that I very much feared a laceration of the perineum. After the birth of the child I introduced my hand to find out what was going on in the womb; and I found a double laceration on the right side to such an extent that I feared it had been torn into the peritoneum. The patient was pretty much prostrated by shock, and after the immediate alarming symptoms passed away, she still complained of more than ordi-

nary pain for a primipara. She continued to suffer more than usual pain for two or three days. Since that time she has had an unusual amount of soreness in the region of the womb, but there has been only little more discharge than usual. I examined her to-day, and find that the case seems to be doing admirably, and I hope that there may be no bad consequences. I am inclined to think that this accident occurs much more frequently than is generally supposed by the profession, judging by a number of cases in gynecology where I have found indications of laceration.

DR. POLLAK.—Was there much hemorrhage?

DR. ROWLAND.—Not a great deal; still more than there would have been otherwise. The hemorrhage continued for several days. The laceration seemed to be an inch and a half long, and the lips of the wound were considerably everted.

DR. RUMBOLD.—I think that Dr. Rowland would add greatly to the value of his observations if he would inform the members of the Society, say in six months from this time, of the result of the healing of this laceration.

DR. HURT.—From the case as reported by Dr. Rowland we would infer that there was tardiness in the dilatation of the os uteri. It seems that at the time the laceration took place, when the patient noticed that something unusual was taking place, the head was distending the perineum. Usually when this occurs the os uteri is fully dilated, and in fact, at that stage of labor, the head—the largest part of the fœtus—is not engaged in the os uteri. It would be interesting to know, if the fact could be ascertained, whether the laceration commenced in the os uteri, or in the vagina. In a labor having advanced sufficiently to distend the perineum, the head has usually passed out of the cervix, according to my conception of what takes place in natural labor.

DR. JOHNSTON.—I supposed that the laceration of the cervix took place before the head had passed down in the soft parts. The laceration usually takes place there first, but we cannot discover it until the child is born.

RR. ROWLAND.—I am not able to say, of course, when the laceration occurred. The only indication I had of it was that the woman complained of considerably more pain than usual a

short time before the birth of the child's head. Perhaps I should have stated the dilatation of the os was about as usual, except that it was rather slow in dilating; and as the pains were rather feeble, and the labor protracted, I gave her a very small amount of fluid extract of ergot; but not a sufficient amount to produce any unusual pains. Labor progressed slowly and very steadily. I am inclined to think that there will be very little to mark the place of laceration in six or twelve months, judging from its size at the present time. I might state that I have taken more than ordinary pains in having the vagina kept clean by using carbolized injections twice a day. I have kept her very quiet, and in a horizontal position.

DR. MAUGHS.—I cordially agree with Dr. Johnston in what he has stated in regard to the operation for laceration of the cervix;* the question seems to be "who killed Cock Robin?" I claim to have killed him in a paper that I read before this Society, and published in its proceedings in 1868. In this paper I denounced the universal resort to this surgical procedure, the bi-lateral operation in dysmenorrhœa. Some gentlemen boasted of having performed it 300 or 400 times, and I predicted that in ten years the man would not be found who would boast of having performed it anything like that number of times in a lifetime. I stated at that time, that the bi-lateral incision was a valuable addition to uterine surgery; I stated that there were a few cases in which it was really a most valuable procedure, but that it was not even generally the best procedure in dysmenorrhœa; I stated that there were a few rare cases of indurated, conical pointed, inter-vaginal cervices in which the bi-lateral incision would be the procedure, but that they were rare. I have performed it a few times, a very few. The fault is not with the operation, it is in the montebankism, the desire for notoriety which has become so marked in the American people. As soon as the procedure was published, every one rushed forward with a paper, and published as large a number of cases as possible. It was stated in this society by one of the members, that among the earliest of these operations was its performance by me upon his wife for dysmenorrhœa, and she was greatly relieved. I say it is valuable in a few cases. The operation of Emmet is having its day. It is valuable in a few cases, also. I have performed it, but we

*See the number of this JOURNAL for July, 1881.

are not justified in performing it on every case of slight laceration of the intra-vaginal cervix. In almost every labor, especially in primipara, there is more or less fissure of the os uteri. It is almost a necessity in primipara, and it is stated by Klopp that it takes place in almost every labor, however natural. In a few months it is scarcely discernible, but sometimes it remains raw, the granulating surfaces are closed in a manner, but not cured; then it is necessary to denude the edges and close the wound. I have seen two or three cases in which this would have been the best procedure, and I have seen a case in which it was the only advisable procedure. This was a case sent to me from a distance, a case of procidentia, which was the result of hypertrophy of the intra-vaginal cervix from a laceration, a bi-lateral laceration of either side. It was split up to the vaginal junction. This lady was past the menopause, it having happened 14 years before at the birth of her last child, and remained all that time; the raw granulating surfaces becoming enormously hypertrophied and producing procidentia. There were only two methods of procedure in this case. The one was the operation of Emmet; the other was to amputate this enormous hypertrophied cervix. I chose the former, though the other was probably equally valuable. The operation is one of the most simple in minor surgery. One operator boasted of having lacerated 450 cervices and, therefore, he created a large field for operation. Doubtless Dr. Schenck is sewing up some of these cervices now. Whenever I get a case of a badly lacerated cervix I am in the habit of saying to the patient: "You have been a patient of Dr. Pallen." It is a very simple operation to sew up these lacerations, a few strokes of the scalpel, and a few wire sutures is usually all that is required. I said in 1868 that in ten years there would be no man who would boast of having performed Emmet's operation 100, 200 or 300 times. But still it will always be a justifiable operation in certain cases, although it never can become one of universal application.

I have found those cases that Emmet speaks of, where the laceration leaves a small cicatrix; but I don't believe it causes reflex irritation. Emmet is not gospel with me. There is no doubt that Emmet has accomplished much in his profession; but his doctrines must be weighed in the balance and a good many of them will be found wanting. The laceration of the cervix might happen at almost any point if there is an obstruction at

the brim of the pelvis, at the superior strait, or if there is an obstruction by a malformation of the cavity of the pelvis, a narrowing of the cavity in the conjugate diameter. The head generally passes through the mouth of the womb and the superior strait at the same time, if the superior strait is of full size or larger than usual; but it not unfrequedtly happens that the os continues to cover the head of the child until it reaches the perineum. I have seen the head of the child in the inferior strait still covered by the excessively attenuated anterior lip of the os. There may be a laceration in the superior strait, or it may pass into the inferior strait and be lacerated there. The point of laceration would depend very much upon the undilatability of the os.

DR. BERNAYS.—I was glad to hear Dr. Maughs put himself on record in the manner he has done. I think his judgment in regard to the value of Emmet's operation is correct in every respect. The operation is an exceedingly simple one. I have no doubt that the operation is beneficial in some cases, but they are very rare. Any woman that has ever given birth to a child at full term may have a cicatrix. Of course, these cicatrices are of various sizes, and of different depths and localities, and if anyone chooses to sew up every one of these little rents he can find plenty of cases for operation. But there is another class of cases where there is a sort of fissure, which is comparable in every way to fissure in ano, or fissure in the urethra; and these cases must be operated upon, because they give rise to serious symptoms, presenting indications for the removal of the diseased tissue. I have only performed this operation three times in quite a long time; and the reason probably is that I have grown less zealous than I formerly was. I used to perform it frequently; I remember two years ago I reported 17 cases in which I had performed Emmet's operation. Since then, although my practice has increased, I have performed the operation only three times. One case is of some interest and I will relate it to the Society; it shows that this operation can be performed upon a woman who is three months pregnant, without producing abortion. The way I came to find this out is rather singular. A physician brought his wife to me and told me that she had a rent extending almost up to the insertion of the womb into the vagina; and that she suffered extremely from vomiting and tooth-ache, and with reflex spasm from this fissure. Upon exam-

ining her we found the womb enlarged to about the size of a man's fist; it was very soft. We also found a large rent nearly three-quarters of an inch long in the left side of the womb. The os was much hardened and the vaginal portion had callous edges. It was a typical case for Emmet's operation. I asked the husband if his wife was not pregnant, as the womb was enlarged; but he said she was not, as he had introduced a sound within the last two weeks. I proceeded to operate. My operation is different from Emmet's operation as he describes it. I make two clean surfaces exactly coming together in a point—uniting as a triangle. I then put in three or four silk sutures, and it is done. I think this makes the neatest operation. In this case it healed up very kindly; there was no trouble at all. In another case—I don't know that this is a good place to report professional mistakes either—but in another case where I performed the operation on a pregnant woman an abortion resulted. I would like to ask Dr. Maughs to give his opinion as to the reason why so few physicians perform this operation in the United States?

DR. MAUGHS.—I can show in a minute how the operation is performed by a diagram. It is the most simple thing in the world. The doctor asks me why so few physicians perform this operation. It is because they have no confidence in themselves when it comes to a surgical procedure. Some men have practiced medicine all their lives, and yet have never applied the forceps. There are thousands of practitioners who are afraid of anything connected with surgery. I know an excellent practitioner of this city, a man who has practiced for years; yet he has never passed a male catheter, and would not attempt to pass a female catheter. There are more men in the profession who shrink from the simplest surgical operation, than one would suppose. Nothing is easier than the application of the forceps in the second stage of labor, when the head has rotated occiput forward in the inferior strait; and yet there are some who would be afraid to attempt to apply them, and would let the woman suffer twenty-four hours without attempting to put it on; there is perhaps an improvement in the performance of this operation that may save some trouble. I will illustrate it here: Say this is the laceration of the os, that is the intra-vaginal cervix, the uterus is above. Now the first procedure is to take a hollow needle and pass a silver wire through it, then pass it through in this way, bring it out

here, pull it down and tie the ends together, and you have a permanent hold. The lacerated surfaces are brought into exact position. We just pass the ligatures around here commencing at the laceration, the wires are then brought together.

Maternity at an Advanced Age.

DR. HURT.—It seems to me that the opposition which has been expressed by some is not against the operation, since it is admitted that there are cases in which it ought to be performed; therefore the opposition is not against the operation, it is against the abuse of it. Well I suppose we could take the same position against any operation. I don't want to cut short the discussion of this matter, but I wanted to make a statement here which came to my knowledge in regard to the age at which it appears a gentleman contends that his mother had reached at the time of his birth. A gentleman was examined in the town of Cameron in this state, for insurance; and he states that he is 39 years of age, and gives his mother's age at 103, and still living. The application was referred to me and I took exception to the fact that the statements made his mother 64 years of age st the time of his birth, and I wrote back calling his attention to this fact, and in reply the applicant insists on the original statement, and says that his mother lives with an older son in Indiana, and is now in fair health for a person of her age. I was acquainted with a family in Kentucky, some 30 years ago in which there was a maiden lady who when 53 years of age married, and in the course of twelve months she gave birth to a healthy living son. A lady, a mid-wife in this city, informed me the other day that she was 57 years old when she gave birth to her last child.

DR. BERNAYS.—In this connection it may be well to bear in mind that the fact that menstruation stops about the age of 45 would have no bearing on this subject, because we know that ovulation is independent of menstruation.

DR. JOHNSTON.—I would like to enquire when ovulation ceases. Lawson Tait says that ovulation and menstruation are independant of each other.

DR. HURT.—I don't know at what age in female life ovulation ceases, but I believe from recent reports of observations by scientific investigators on the subject, it is conceded that ovula-

tion commences very early; in fact, I believe it is maintained that it commences in intra-uterine life.

DR. MAUGHS.—There are very few well authenticated cases of women over 60 years of age having children; and while it is not at all impossible, it is improbable that a woman will have a child after she is 60 years of age, after she has ceased to have the epi-phenomenon of menstruation. Most women between the ages of 43 and 48 years cease to menstruate, that is, they no longer have a colored discharge because they cease to ovulate, and the ovaries fall into a state of senile atrophy. There is no longer vitality enough to develope Graafian follicles, and there is no discharge of ova; and it is necessary to have an ovum in order to have impregnation. It is not absolutely necessary to have the epi-phenomenon which is usually present, however. It is not possible for a woman to conceive who does not ovulate. Dr. Hurt mentioned the fact that ova are present in the female fœtus; the ova are an essential part of the ovary. The ovaries are not glands. They do not secrete ova at all. Changes are constantly taking place in the ovaries and uterus of the female fœtus, and the ova are undergoing changes preparatory to their fitness for the development and reprodution of the species. But it is not ovulation that occurs in the fœtus in utero.

DR. DUDLEY.—I can mention a case somewhat analogous to the case mentioned by Dr. Hurt. I remember very distinctly that in my boyhood a lady who lived very near to us, and who had raised a large family, gave birth to a child when she was 52 years old. I paid but little attention to the matter at the time, except that there was considerable talk about it in the neighborhood that a lady of such an advanced age, who had not had any children for a number of years should give birth to a child. It was a very delicate male child, and lived perhaps a year or a year and a half. The lady was in very good physical condition, and perhaps this had something to do with this case. She was a very large, plethoric woman; a woman of full habit. Perhaps the menopause may have been deferred later than usual in her case.

SATURDAY, Dec. 17th, 1881.

Embolism of the Central Artery of the Retina. By Wm. Dickinson, M. D.

The subjects Embolism and Thrombosis, though of recent recognition, constitute one of the most interesting and important chapters of medical science. Magendie, Cruveilhier, Gaspard and others achieved much for patholgy when they ascertained that the injection into the blood current of animals, of starch, quicksilver and various other substances produced fatal inflammations. The knowledge of these results, perchance, by analogy, foreshadowed to the keen mental vision of Virchow, the probability that foreign bodies, differing in kind, in the circulating fluids of man were capable of producing similar pernicious results. In any event, he published in 1846 his observation upon the effects of the detachment of Thrombi in the veins, and suggested the probabilities that the same process might take place in the arteries. The experience and added observations of a single year confirmed that, which was even then more than a hypothesis, and in 1847 he was the first to enunciate the theory that detachment of fragments from the valves of the heart may be carried by the blood to remote parts, e. g. the brain, lungs, kidneys, spleen, etc., and become impacted in a distant artery.

Kirkes, Tufnell and others five years later, confirmed these same observations, though to the former in England is generally awarded the honor of the entire discovery. Virchow seems to have been the first to determine the true pathological cause of many necrotic conditions occurring mysteriously in different organs, and refer them to emboli, and to have originated this term in description thereof. Prof. Graefe was the first to announce about twenty-five years since, the discovery of embolism in the central artery of the retina. The instances in which this condition has been found are comparatively rare; probably not more than *fifty* cases, by all observers have to this date, been reported. Among these was a most interesting case occurring in the practice of Dr. Williams of this city, and by him reported to this Society one year since. In a practice, general and special of more than thirty years, not a *single* case had *then* occurred to me.

But in illustration of the trite saying, "it never rains but it pours," four cases of this affection since October 27th of the present year have come within my own practice. A narrative of which I shall briefly give in the sequel. I beg at first to present a few cases which constitute a part of the literature on this subject, as they represent typical cases and the usual symptoms.

"Dr. Sämisch narrates the case of a man of 52 years of age, who, upon waking in the morning two days before presentation, discovered he could not with the right eye perceive the lower part of any object. He connected his ailment with a "gum-boil" that had formed about a right upper molar tooth ten days before.

With the ophthalmoscope the retina presented a milky-whitish color, through which the choroid was dimly visible. The upper portions of the optic disc and vessels were normal; but the distal portions of the descending arterial branch were visible as a thin white cord, seen with difficulty in the turbid retina. No exciting cause could be assigned. No improvement in vision observed during the ensuing two months.

Dr. Hirschman records the case of a nobleman of 55 years of age, who during the preceding seven years had suffered from repeated attacks of articular rheumatism and his heart by auscultation furnished a systolic murmur. Loss of vision with his right eye had occurred suddenly six months previously while in the act of stooping, which was attended by a sensation as of fire in the eye.

The ophthalmoscope detected but slight changes in the optic disc or retina; but the ascending branch of the central artery was obstructed on the the disc, and empty or nearly so beyond the point of obstruction.

O. Just reports the case of a man of 36 years of age, who had often suffered from shortness of breath and palpitation. Without obvious cause on a certain occasion he suddenly perceived dark wheels before his right eye, followed in five minutes by total blindness. Three days later the optic disc presented a blueish white appearance; central vessels resembled delicate threads. At the macula lutea there is a smoky cloudiness. Left eye normal; heart a little enlarged; in the aorta there is a slight diastolic murmur. Ten days later he had regained some perception of sight. Under the use of Pot. Iod., in ten days the patient could distinguish movements of the hand in the outer

part of the field of vision, and in fourteen days large objects situated in the line of the optic axis; eight weeks after first examination he could count fingers. But a still later report states all perception of light was lost, probably from atrophy of the retina."

In respect to the beneficial results of treatment, Schneller relates a case in which vision was almost perfectly restored.

The existence of embolism of the central artery has after death been demonstrated in probably less than a dozen cases. The first demonstration was made by Prof. Schweigger, of an eye that first came under the observation of Prof. Graafe. The patient was then suffering from stenosis of the aortic valves, probably from endocarditis, from which disease he died about one year subsequently. The eye being removed and examined after death, the central artery of the eye just before its entrance upon the optic disc was found to be completely occluded by an embolus which had forced its way up to this point, but here in the lamina cribrosa, where no room was to be gained, it remained fast.

At the time of original observation, vision was lost in the affected eye. "The refracting media were clear, optic nerve quite white, but not opaque as in atrophy, but normally translucent. All the vascular trunks upon the optic disc were greatly contracted. The principal arteries upon the retina appeared like delicate lines, and their branches were correspondingly small. The veins everywhere were thinner than normal but larger near the equator." A few days later in the veins irregular impulses towards the papilla were observed. Later the retina in the region of the macula lutea became opaque. A grey, white infiltration appeared which extended to the temporal margin of the optic disc and shaded off about its periphery imperceptibly into healthy tissue. "The position of the fovea centralis was occupied by a cherry red spot, about one-quarter of the size of the optic disc. The color of the spot was so intense as to suggest at once the suspicion of a hemorrhage, but which was due to the contrast of color with the infiltration. In the course of two or three weeks the infiltration disappeared, and with its disappearance the intense red color of the macula lutea passed imperceptibly into a light brown color. There was, and continued to be, only the slightest perception of light. Atrophy of the optic nerve gradually supervened."

Sichel, fils, also demonstrated the existence of an embolus in the central artery, one eighth of an inch from the sclerotic entrance of the optic nerve. In all cases the retina soon loses its transparency, a greyish cloud enshrouds the disc's immediate neighborhood; it may extend and also surround the macula lutea. This is due to œdema, and may in a short time disappear.

The cases occurring within my own practice are as follows viz:

I. Mrs. M., Sparta Ills., 35 years of age, married but has had no children, consulted me Dec. 7. Three weeks prior to this date she experienced the sensation of a foreign body in the left eye, but her friends upon examination failed to detect any. This continued for a day, and upon its appearance she perceived a dark spot apparently situated near the external canthus. Attempts on her part to scrutinize this, caused it to remove in the same direction in which the eye was moved, and thus ever to elude observation. The spot seemed of the size of a dime, the centre of which was of a dark green, almost black color, surrounded by a greenish halo. Slight pain was experienced at the time of invasion, but none since. She had suffered no blow upon the eye or head, or any form of violence to which its occurrence could be referred, nor did it occur at a catamenial period, which function was regularly maintained. Vision at first suddenly and seriously impaired continued to deteriorate for ten days when it became extinct. This has since gradually improved and she can now discern letters two inches in length at four feet; but the black letters seen imprinted upon paper of light green color; she can see more distinctly after a period of continued effort.

Ophthalmoscopic signs: Divisions of the central artery on the disc and more remote are almost entirely obliterated. Veins present, but thinner than normal. Vitreous body hazy, which rendered it impossible to discern the macula lutea, but extensive greyish infiltration existed between its site and the optic disc. Prognosis in general, unfavorable; but the improvement of vision already experienced, was an indication of favorable omen. Ordered exhibition of Pot. Iod., and Hydg. Prot. Iod., alternately each week.

II. Miss. W., a lady of 25 years, consulted me first, Oct. 31st. For ten or twelve years she has suffered much pain in the righ

eye, right side of face and in right shoulder, but vision remained unimpaired. About six weeks since, in the evening after a day of unusual employment and consequent fatigue, exposure part of the day to a drizzling rain, and some use of the eyes in reading, the *right* eye felt as though it had received a slight blow. This was accompanied by a little pain, and all objects instantly seemed enveloped in smoke, and were obscurely seen. At about the same time, she had an abscess in external meatus of right ear, and three others subsequently. She thinks vision has improved a little since. My record states; now vision is very much impaired, can only discern No. 100 of Jæger and that peripherally, i. e. letters two inches in length, at thirty inches; vision to her appears obscured by an opaque elliptical disc, greater diameter horizontal, twelve inches by eight, and situated apparently about eighteen inches in front of the eye.

Ophthalmoscopic signs are, refracting media all transparent except the vitreous, which though it obstructed, did not prevent inspection of the fundus. Quite a large atrophic spot (scotoma) of irregular shape in the choroid is revealed, situated very near the site of the macula lutea, the latter could not be distinctly detected. Extensive œdema of the retina was present.

Under treatment of full doses of Pot. Iod., and ergot, in ten days its density had appreciably diminished, especially observable at the periphery. The use of remedies internally was re-inforced by that of galvanism. Under date of Nov. 22, she writes, "there is a perceptible loss of vision in the affected eye, the ellipse is more dense; but a bright speck or opening in its equator on the nasal side has appeared." Believing this to be a favorable indication, I desired her to return to the city, which she did, December 3d. Objective signs had undergone no palpable amelioration. Placed her immediately on pills of Hydg. Prot. Iod. gr. ½, three times a day. In the short space of three days, the opening (fenestrum) referred to had apparently enlarged and assumed a triangular shape, and through this direct vision was possible. Four days later the triangular opening had perceptibly enlarged, presenting a jagged margin, the periphery of the opaque elliptical disc underwent the same modification, besides a diminished density. Vision also improved, she now being able to discern some of No. XX (i. e.) letters about three-eighths of an inch in length. Besides the pills mentioned, I employed galvanism twice daily, with entire relief of the neuralgia which had

been quite a persistent symptom, and of contributing to the achievement of great amelioration of vision. After remaining for a week under this treatment she returned home with directions, under the supervision of her medical advisor to continue the pills, alternating each week with Pot. Iod.

III. The third case was that of Mrs. S. 30 years of age, a colored woman of large stature and healthy; married but has had no children, who consulted me Oct. 27th. On a certain evening about two weeks previously during a domestic jar, she received upon the right eye a blow from the hand of her husband. From this she observed no immediate effects, but in the morning following, even before rising, all objects with the right eye appeared very dim and of a light green color. Vision has since gradually declined, till now she can scarcely discern even the form of large objects at even five feet distant. At this distance the flame of a lamp is obscurely seen and much elongated. Objects by day appear of a dark green color, and very dark, almost black at night. No pain in eye or head at any time, though the eye has seemed too large for the orbit. She is not subject to headache, catamenia regular, no suspicion of syphilis, nor addicted to intemperate habits.

Ophthalmoscopic signs: All dioptric media are transparent, papilla and fundus well defined, retinal arteries are few and very much attenuated. The macula lutea clearly defined, of a cherry red color, very dense at centre, but fading in density to its circumference. It has a diameter of about one line, and situated in the centre of a white spot, (scotoma) of the shape of an irregular parallelogram, demonstrating atrophy of the choroid from œdema. Under treatment similar to that pursued in the former cases, vision improved to a considerable degree, but on account of the irreparable injury sustained, it can never be restored to that formerly enjoyed.

IV. The fourth case is that of Mr. R. of this city, fifty-nine years of age, a shoemaker by trade, who presented himself on Dec. 13th. One week before this date while engaged in his customary work, sewing shoes, hand work, without the slightest premonition or antecedant cause, he suddenly observed vision in his right eye to become almost totally annihilated; peripheral vision was retained in a slight degree especially at external canthus. General health good, though he has had occasional visita-

tions of articular rheumatism to a slight degree, but never incapacitated for work. Has never had headache but twice in his life and then not severe; inclined to constipation; no syphilitic history.

Ophthalmoscopic signs: The anterior refracting media are transparent but the vitreous, hazy to a considerable degree. Still the papilla is discernible and of a much whiter color than normal; the arteries are much diminished in size and resemble red threads. A hemorrhagic extravasation is observable situated above the papilla (inverted image) about one-third its diameter distant. The macula lutea is plainly seen, though somewhat obscurely on account of the opacity of the vitreous. It presents the appearance of a nucleus of dark red color centrally, but fading off to its circumference till lost in the dense infiltration surrounding it. The diameter of the entire efflorescence is about that of the papilla. The space intervening between it and the optic disc is also of a greyish white color from sub-retinal œdema. The pupil responds imperfectly to atropine. Since the invasion of this affection he has experienced an obscure pain in the right mastoid process. The treatment ordered was Pot. Iod. and Pot. Brom.; but prognosis unfavorable to the last degree. I desired him to return in two days for further observation, which he has failed to do.

I may add that in all cases of embolism of the central artery of the retina, the lesion is a very grave one, and the prognosis, as regards ultimate restoration of vision, is extremely unfavorable. And it is to be feared that even the amelioration in any case gained, may prove transient, and atrophy of the optic nerve with its attendant consequences will speedily supervene.

TRI-STATE MEDICAL SOCIETY.

Article XXVIII.

[A Stenographic Report made by the Journal's Reporter.]

Puerperal Peritonitis.

Dr. J. A. Ireland of Louisville.—Mr. President and gentlemen of the Tri-State Society. I am unexpectedly called upon to open this discussion. I have had no time in which to make any especial preparations; for this reason I will ask only a few minutes to make the opening remarks. What do we understand by puerperal peritonitis? We have a great variety of opinions expressed with regard to puerperal fever or peritonitis for indeed we have few cases of puerperal fever without puerperal peritonitis. Some authors are decidedly of the opinion that we have a specific disease known as puerperal fever, whilst others are equally positive that we have no specific disease, every so-called case of puerperal fever is really one of septicæmia, accompanied very often by cellulitis, peritonitis etc. In the books we have beautiful discriptions of pelvic cellulitis and pelvic peritonitis. I think however, that upon making a post-morten examination you will scarcely ever see a case of pure pelvic peritonitis. Along with this we have what is called puerperal fever; this name is a very unfortunate one as it doesn't signify anything with regard to the pathology of the disease.

I would like to hear an expression of opinion with regard to the communicability of the disease. I say this because I know there is a vast difference of opinion with regard to the contagiousness and infectiousness of the disease. These two terms have been so blended that they have been made to mean almost every thing so that I prefer the name or rather word "communicability" At one time the almost universal opinion all over this country was that this disease was not communicable—physicians all over the country took this ground. Dr. Tyler Smith went so far as to say that if a physician visited a patient, who had puerperal fever, the poison would settle in his clothing, in his head, in his

nails etc, and upon his visiting another patient would communicate the disease to her. For this he(Dr. S) adopted a very careful course of bathing, and disinfecting of his person and clothes after visiting a patient with puerperal fever before he visited another patient in the puerperal state. Dr. Meigs taught that puerperal fever was communicable. I have not had as much practice in this disease as some others, but so far as my experience goes, I have no more doubt that the genuine puerperal fever, so-called, is a communicable disease than I have of my own existence. There are men in the profession and some in the city in which I live, who hold that the doctrine of the communicability of this disease is nonsensical. If the disease is not communicable why do we sometimes find it traveling with and following the track of one particular member of the profession all through a community while other gentlemen who are practicing in the same neighborhood, delivering children without any occurence of the disease in their patients? Dr. Horner of our city, not long since told me that when he was a boy and lived in Philadelphia he remembers distinctly, that Dr. Meigs locked up his house and went to the country simply because the disease was following him all around the city of Philadelphia. I have seen similar instances in the country where I live. I have known a physician to deliver a woman who afterward got puerperal fever, he visited case after case in the community and carried the poison from one to the other.

I don't know what relation there may be of this disease to puerperal fever, or erysipelas, scarlatina, or measles, but we know that it is very liable to occur during the prevalence of these diseases; we know that it is more likely to occur during the prevalence of erysipelas, or of scarlet fever than any other time; we kuow that if a man makes a post-mortem examination of one of these cases and afterwards delivers a woman, she is liable to have puerperal fever.

DR. MAUGHS of St. Louis.—I came in just as Dr. Ireland was concluding his remarks. I may say *in limine* that I cordially agree with him, perhaps, in all that he has said. The communicability of puerperal fever is, however, still a disputed point. The most distinguished men in the profession in the United States—Fordyce Barker and others—united in the opinion that it is a specific disease—a peculiar kind of fever that is *sui generis*. Dr.

Meigs refers to cases of puerperal fever where he thinks the disease was communicated by means of the fingers, clothing, etc., of the physician, and thus he concludes that the disease is communicable. But there is a kind of puerperal fever, so-called, that is not infectious, there are some epidemics that are scarcely communicable; thus, a pneumonic disease is scarcely communicable, that is, it is not ordinarily so. It prevails through the country without communication from one patient to another.

Puerperal fever is auto-infectious and hetero-infectious. It is produced in most cases; it is produced as well as aided by putrid discharges, poisons which arise from the epithelium or mucous membrane immediately after the birth of a child. Pieces of epithelium are removed and the blood-vessels being patulous, are ready to absorb the poisonous matter. The gaping sinuses are ever ready for the introduction of septic matter. It may be a blood clot is taken up and, as it decomposes very readily, is absorbed and a condition is present, that, in the course of time, developes septicæmia. It happens in this way in most cases. They are auto-infectious—produced by auto-infection in many cases. But it must be borne in mind that puerperal septicæmia is infectious and it is so to the last degree. Many physicians are perfectly ignorant of the dangerous character of septicæmia, from its auto infectious nature and its hetero infectious nature. The physician goes from a case of erysipelas to his lying-in patient, and communicates the erysipelas to her directly and she dies of puerperal fever. The erysipelas inflammation spreads rapidly and the case is almost hopeless because the puerperal peritonitis almost never results otherwise than fatally. But in their ignorance of the infectious nature of these diseases and of the fact that erysipelas in an individual may be correlated with puerperal fever in the lying-in woman it has been the habit of some physicians to go directly from a case of erysipelas to the bedside of the lying-in woman. It has been so in a multitude of cases. I think it is wrong. The physician should bear in mind constantly the danger of attending cases of zymotic diseases and then hastening directly to the bedside of the lying-in woman. Erysipelas is correlated with puerperal fever undoubtedly, internal erysipelas and puerperal septicæmia, and puerperal erysipelas is rapidly fatal. Now if a physician has a case of puerperal fever, being ignorant of the communicability of the disease, continues his regular practice, visiting five, ten, or twelve lying-in

patients, the probability is that he will carry the disease from one to the other, and an epidemic results. Had he taken the the proper precautions, the disease might have been confined to a single case. Physicians should always bear in mind the fact that zymotic diseases are correlated to puerperal fever and thus avoid spreading this disease.

During the prevalence of scarlet fever, measles, small-pox and other zymotic diseases, but especially of scarlet fever and diphtheria, the danger should be borne in mind. An infection which in the ordinary individual would produce scarlet fever, in the puerpera would be probably puerperal septicæmia. And so with erysipelas, what communicated in any other manner would be erysipelas communicated by absorption of morbific matter from the vagina—the zymotic matter entering directly into the circulating fluid of the womb,—becomes puerperal septicæmia. This point is universally believed, I think. It is the practice of some physicians to go from a case of erysipelas, walk around the block and go right into the presence of the lying-in woman. They thus carry contagion in their path, of course. If I am attending a case of erysipelas—I don't usually attend such cases—but if I am obliged to attend such a case, I do not attend any obstetric cases. The doctrine was promulgated some time ago by Dr. —— that if a physician was attending a case of puerperal fever, making vaginal and uterine injections, and coming constantly in contact with septic matter, before attending any other patient, he should change his clothing, take a warm bath, and use carbolic acid in order to thoroughly disinfect himself. Then he can go to the next case with comparative impunity. In these cases we cannot rely upon medication. The only way to deal with it successfully is to cut off the supply and then the patient may survive the attack. We should resort to disinfectant washes—washing out the uterus thoroughly and keeping it washed out so there is no odorous discharge—none whatever. In that way we at once cut off the supply and give the patient the best possible chance. At the same time the temperature must be watched and regulated so as to keep that from destroying the patient before the poison is eliminated from her system.

DR. BAUER of St. Louis.—This subject seems to me to be an intricate one, although it would seem to be exceedingly transparent from the statements we have just heard. The subject is

a very intricate one, and we are not yet clear as to the points—we have not yet struck bedrock. But a short while ago we were taught that it was dangerous to touch the peritoneum. We know that we can open the abdominal cavity at any time you please and for any length of time, providing you do not expose the internal cavity long enough to produce anæmia.

You can blow air into the peritoneal cavity with all the germs of bacteria and bacilli as long as you please and it does no harm and is followed by but little inflammation. I have recently read an article from the pen of an Italian gentleman who has made thirty-seven ovariotomies for various objects, for pelvic cellular abscess, for tubal-pregnancy and so-forth, and but one patient out of the thirty-seven died, and that patient was doomed to death almost, when he touched her. Thus we have learned from experiments that you can fill the entire abdominal cavity with milk and in the shortest possible time it will be absorbed and digested by the substance of the body. That is our knowledge now, and how much we may learn yet we don't know. We are just on the threshold, and the questions are not easily disposed of, as we have just heard. That foul material produces septicæmia is, I think, a well established fact. It is for the reason that when a surgeon allows this foul material to accumulate in a wound—the germs of these microscopic organisms—he produces septic infection there, that Prof. Lister cautioned us that we must keep the wound exceedingly clean. But Lister goes into details beyond necessity.

Suppose that you take away a piece of peritoneum and clear the sore surfaces where the secretion will necessarily issue, you get the food for the bacteria and bacilli and they will will develope there in the shortest imaginable time. But with regard to peritonitis, it is without any exception, one of the most fatal and destructive diseases that the surgeon can meet with; but we have learned to protect ourselves against that. I have heard a good deal about septic peritonitis, this infectious agent which the gentlemen have just spoken of, and I should like to know how septic peritonitis comes about. Now two ways have been mentioned in which septic peritonitis might originate. One is, that the infectious material is carried into the vagina and into the uterus. Now this may cause inflammation of the uterus itself, but the peritoneum does not participate in it all this time, nor can it. In order to get septic peritonitis I think it is neces-

sary to have the infectious substances developed within the peritoneal cavity. You must get the germs into the peritoneal cavity. But I don't think you will get septic peritonitis by the carrying of the poison into the uterus, for if it pass into the womb it will be absorbed by the veins and you get septic phlebitis; from septic phlebitis you will get symptoms of peritonitis but it is not septic peritonitis—none whatever. You get a regular inflammation of the peritoneum and very often you get all the products of an active peritonitis. I should think this is the explanation of it. I have had very limited experience in this matter, but my experience and my reading teach me that. Now gentlemen, what is possible to do with antisepsis, and what we can do in the way of peritoneal surgery, is really wonderful. I performed about three months, or rather ten weeks ago, an operation to remove a very large tumor which occupied the entire abdominal cavity, pressing the intestines and the abdominal organs into a very small space. I did not have a very accurate diagnosis, and the patient couldn't help me at all. I knew it was a large cyst—a multilocular cyst. I cut into the abdominal cavity and dealt with facts as I found them, as I preferred this to paracentesis as I wished to avoid the contact of the amyloid substance of the cyst coming in contact with the peritoneum; therefore, I did not choose to make the puncture. I took the chances as to what I might find. My patient, a colored woman, knew very little about anything outside of herself, and still less of herself. How this tumor came there she doesn't know. It was there when she first noticed it, and it was then pretty large. She made a good joke of it and said she thought it might be the cucumbers or potatoes which she had eaten the evening before. Well I did not know whether it was an ovarian cyst, or whether it was fibro-cystic tumor originating in some other part of the pelvic cavity, but I was prepared to deal with it as I found it. I opened the cavity and punctured a large cyst which happened to be multilocular. We found that a number of fibrillæ right in the centre of the cyst went down and connected with the uterus, and it was surrounded with a great deal of indurated material such as we find in these tumors. I was surprised now to find that the lateral ligaments had been raised up with the peritoneum almost midway on the tumor. In order to remove the tumor it was necessary, either to take out a piece of the uterus, or else leave a piece of the tumor; I chose the latter. I took out both the

lateral ligaments. I used the thermo cautery to cut off the lateral ligaments, then I took out the tumor leaving a slight cap remaining as it were. I then charred all over it with a hot iron, and closed the abdomen. I expected no less than death in this case, but the woman got well and she was returned to her home in seventeen or eighteen days.

Now, gentlemen, who could have done that twenty years ago, or even ten years ago, and have had success in such an operation? No man was more surprised than I was. The patient on the other hand, was not at all susprieed; she expected to get well. But the doctor expected her to die, and was greatly disappointed and most agreeably so. We are not yet fully acquainted with the best antiseptic means, gentlemen. It isn't but a very short while since every surgeon used carbolic acid for everything. In the last meeting of the International Medical Congress, Mr. Keith said, right in the presence of Mr. Lister, that he had to give up the use of carbolic acid in his last Battey's cases. He lost all of them by carbolic acid if he used it strong, and if he dilutes it too much, it is of no use—it doesn't kill the germs and these microscopic organisms are developed in that locality. But gentlemen I know that they will live in it, they remain alive, and remain capable of developing in the carbolic acid. Gentlemen may prevent suppurration and septicæmia by its use but when it is once established it takes its course and you can do nothing with it. But why are we not furnished with statistics by Mr. Lister. I happen to have performed quite a number of operations of amputation of the thigh, which, as you are aware, are of a very dangerous character. The percentage of death in this operation is very considerable, yet I succeeded without carbolic acid, and lost but ten percent. of some fifty cases. I lost only five cases out of fifty-five. Lister lost in about the same number, fifteen cases and of this number, six amputations were. minor amputations. So that when I compare my statistics and the results of my amptutations with those of Lister, I find I have done better without carbolic acid, than he has done with it. What did I do, gentlemen, with my amputations? I took good care from the first. I made it an especial point first and foremost to arrest the bleeding, and I made the flap operation and smaller than the circular operation. I have taken great care to ligate every vessel that was large enough to ligate, so that I should have no further trouble, when once I had closed the

wound it should not be rendered septic again. After that I close the flaps very gently and lightly apply my sutures and put the limb in a cotton pad. I bandaged the limb and after that put on oiled silk. That is my whole treatment, gentlemen, I do nothing else. Prof. Porter some 25 or 30 years ago advocated this treatment, and therefore, I can't claim any originality.

He said very correctly, nature heals wounds. You require no adhesive straps. You don't require a circular bandage, on the contrary, both of these remedies interfere with the healing process. He advises that the arteries be ligated. The surgeons present at the International Congress declaimed very bitterly against Mr. Lister because he didn't come around with his statistics. He made speeches, but he doesn't say what he has done. My honest belief is he is afraid to publish his statistics. So too, with antiseptic washes. I think if you keep the wounds properly cleaned you will have no trouble. Your antiseptic lotions do no more than wash off the germs—those microscopic organisms. Clean water will do the very same thing, and I use nothing else but clean water on my amputations, and I think they have given me better results.

Now take the spray. Well gentlemen, you know we couldn't live without the antiseptic spray. Now the spray is colder than the atmosphere, and when you spray the abdominal cavity, especially in the portion by the peritoneum you take away the heat, you reduce the temperature which is absolutely necessary for the prolongation of life. That is not all. The air is filled with minute organisms and your spray washes them into the wound—collects them and washes them into the wound. That is the reason that Bilroth and other European surgeons dispensed with the spray. I say the spray cannot do any good and it is likely to do a great deal of harm. I believe the best antiseptic remedies we possess are cleanliness and water.

DR. SCHENCK, of St. Louis.—Mr. President; I came here this evening for the purpose of being a listener; but it is very difficult to be quiet when a subject of this kind is under discussion. It is a subject in which every one is interested. Not only the profession, but the laymen; not only the laymen, but the layman's wife; not only yourself, but your children. And, gentlemen, there is no subject in medicine that I know of that has called forth more medical literature than puerperal fever.

Dr. Barker several years ago gave the number of communications and contributions that had been written on this subject; and a year afterwards he said he had not gotten one-quarter of them. Gentlemen this is the hydra-headed monster of the lying-in room. The people of England, desiring to get at some certainty in regard to the communicability of this disease, called together a meeting at the Medical Congress and discussed it, and by special invitation sent over to this country for Dr. Fordyce Barker to represent us, and when they met they discussed this matter and requested all physicians to report peculiar circumstances in such cases. Gentleman, the profession is ignorant on this point. I remember when I first went into the profession, I thought that every woman in the puerperal condition had puerperal fever, and it frightened me.

Gentlemen, we call peri-cervitis and peri-metritis puerperal fever. And so we call a great many things puerperal fever which are not. I tell you there is a disease such as puerperal fever. Now some gentlemen say it is septicæmia. There is putrid matter in the womb. There is a disease of that kind. The patient has quick pulse, high fever and pains; on examination of the womb you find some putrid matters; you give an injection and down comes the pulse, down comes the temperature. This is septicæmia; call it septic peritonitis if you please. Account for it as you will, it is there. But this is a different disease from what you will find when you have puerperal fever. I am not free from it? Anyone is liable. But what surgeon will tell you he ever saw septicæmia running through a country. Who ever heard of septicæmia becoming an epidemic? But septicæmia is not puerperal fever. Call it what you will. Call it septicæmia if you please. It is a distinct affection from puerperal fever. I have charge of a lying-in institution here and I remember very well when I first took charge of it I was frightened at every case of septicæmia, every case of blood-poisoning. I was expecting puerperal fever in everything and I knew it when it did come. It went through my wards like measles go through an orphan asylum. Our institution did not lack cleanliness, but this disease went through the house like the measles goes through a family of children who have never had it. There is no use in cleaning things, it does no good. Don't say your patient has puerperal fever because she has had a child. You can do as you like, gentlemen, cleanliness is near to Godliness. You can wash the womb out when you have got septicæmia. Let the patient have quietude and rest, but if your patient has puerperal fever, be separated from the rest. I think we should be careful to make a distinction between these diseases; between peritonitis and puerperal fever.

Periscope.

Article XXIX.

MATERIA MEDICA AND PHARMACOLOGY.

Gaillard's Medica Journal has the following synopsis of an article written by Dr. Cullen of Richmond, Va., and which appeared in the *Virginia Medical Monthly*:

New Remedies by Charles R. Cullen, M. D., of Hanover County, Richmond, Va.—*Viburnum Prunifolium.*—The black haw bush or small tree, everybody knows; but medicinally, very few know that the profession have in it a real remedy in threatened abortion. or flooding after it. I was called to a lady in her seventh month of pregnancy, with violent pains coming on every five minutes, and which had been increasing for several hours. I gave her at once one drachm of the fluid extract, with thirty grains of hydrate of chloral. In an hour the pains moderated some little, and I repeated the viburnum, with twenty grains of chloral. Two hours after, I gave the same and the pains subsided. The patient slept several hours. In six or seven hours the pains returned again, and I again gave one drachm of viburnum, and twenty grains of chloral; I gave three doses, subduing the pains. Being called away to a labor case, I was absent *twelve* hours, and being sent for hurriedly, I found my patient, as before, with more violent pains, and the os uteri opened three-fourths of an inch. I repeated the same doses four times, and the pains subsided. This condition continued about eight days, but required less chloral each day. Every three or four hours I gave milk freely, keeping the bowels open by enemata. The patient bore the medicine well, and made a good recovery; and two months afterwards went through her labor satisfactorily.

I had often tried hydrate of chloral and other medicines vainly, to check abortion or miscarriage, after the womb commenced opening.

Two months afterwards I was called to a similar case in threatened abortion, with flooding. I gave the viburnum alone, as I desired the patient to be awake in order to report hæmorrhage. In two hours the pains and hæmorrhage both ceased, with good recovery.

I was called last year to another patient—flooding dreadfully—and the contents of the womb were partially removed. I gave viburnum and ergot, and used hot-water injections, with the bag syringe (otherwise called fountain syringe)—a great improvement on the rubber bulb. The flooding was violent, and required continuous use of the syringe and medicine for two days before the hæmorrhage ceased. The abortion was complete.

A short time since I was called again to the same lady, in her seventh month of pregnancy, with violent pains every seven minutes, but no flooding. I gave viburnum and chloral, as before; but the stomach rejected three doses in succession. I then gave four drachms of viburnum and eighty grains of chloral by enema. In one hour the pains moderated somewhat. I gave half the quantity for the second dose, and the pains gradually stopped without further trouble. I used the fluid extract prepared by Parke, Davis & Co., of Detroit.

If this preparation is not accessible, I would use the decoction of the fresh bark. The profession can rely on this remedy, and doubtless many lives will be saved by its prompt use.

Cascara Sagrado, or Rhamnus Purshiana.—I have used this drug for two years, and find it excellent for constipated bowels. When the rectum is torpid, and no other organ is affected, cold water enemata often restore regular passages, particularly after hard labors; but everything fails to act after one or two passages, and this drug proves a good remedy, and requires small doses. It is thought to act by toning the bowel to its natural function; but whatever the theory may be, its good effects have been acknowledged by hundreds of people wherever it has been used. When this remedy fails to act, as it does sometimes, I add one or two drops of the fluid extract of belladonna, and natural passages are obtained.

Berberis Aquifolium.—Having several scaly diseases which arsenic, iodine, and other alteratives failed to cure, I used this drug by itself, and with success. One case was cured with a pint of the fluid extract; another with two pints; and some others

required more. Where constipation or torpid bowels existed, I added the cascara sagrado; and for convenience, I had several thousand pills made, for the cases requiring both medicines; but would prefer the fluid extracts. In several cases of syphilis, the disease yielded very promptly, and without the use of any mercury. As an alterative of the blood, I doubt if this drug does not take its place beside iodide of potassium. Not having had the experience in many of the diseases reported, I am unable to furnish any results from its use, as given in the various journals by practitioners all over the country.

Some physicians report cures of *cancer* from the use of this drug, but not having used it in a single case, I merely mention it, and in connection with the other new remedy—*Chian turpentine*. Whether either or both have any virtue in a genuine case of cancer, remains to be seen and tested by the honest and truthful part of the profession.

I would digress for a moment and report my experience in cancer, and would state that in every city, from Boston to San Francisco, I have looked after cancer cases, with the treatment adopted. Before the late sectional war, I visited a cancer hospital adjoining the suburbs of Memphis, Tenn., and remained all night with the proprietor—formerly a tailor by calling, who got large fees by cancer curing, as he advertised it. I saw forty patients, and probably only four cases of cancer—three of which the cancer-doctor admitted were hopeless. The others were ulcers and tumors of every kind. Some of them very large and easily cured—as the oily-encysted tumors—and for all of which large fees were obtained from wealthy planters. Since the war I visited a cancer hospital in Philadelphia, but saw only some mild cases. Not being admitted within the hospital, with the assistance of a prominent surgeon, we visited many of the cases reported cured throughout the city, but no one case had a physician's certificate that it was a *cancer*. A late report on cancer by a German physician, reports one case in fourteen cured; and doubtless if the cured cases had lived a while longer, the cancers would have returned. While not incredulous about cancer cures, it is best to wait awhile and see results. The concurrent testimony of experienced and honest men should take precedence of money-making quacks.—[*Gaillard's Medical Journal.*

PRACTICE OF MEDICINE.

A CURE FOR HICCOUGH.—*Le Scalpel* gives a very easy cure for a continued singultus, sometimes complicated with spasm of the glottis, introduced by Rostau and highly recommended by Deghillaye, of Mons. It consists in placing the hand flat upon the epigastrium, immediately below the ensiform cartilage, and making firm pressure. Should this prove unsuccessful, place a firm roll of muslin on the same place, securing it by a napkin bound tightly around. In an hour this may be removed, and it will be found that the hiccough has entirely disappeared.—[*Boston Jour. of Chemistry.*

CHRONIC GENERAL PERITONITIS.—In the December number of the *New Medical Journal and Obstetrical Review*, Dr. Alfred L. Carroll, of New Brighton, New York, records an interesting case of chronic general peritonitis, which seemed to have taken its origin in an old pleurisy on the left side, the inflammation passing through the diaphragm and causing at first a perihepatitis, or perhaps an intermediate perisplenitis. The case exemplifies a condition that has been classed among the curiosities of mddical experience, for chronic general peritonitis, independent of tuberculosis or carcinosis, is either ignored or its existence denied by most writers, save as a protraction of an acute purulent attack, and the few who recognize its existence differ as to its pathology and clinical history.

OBSTETRICS AND GYNÆCOLOGY.

ACCIDENTAL ANTEPARTUM-HÆMORRHAGE.—Dr. Edward L. Partridge New York, Physician to the Nursery and Child's Hospital, contributes to the December number of the *New York Medical Journal and Obstetrical Review*, an article in which, after briefly reviewing the current doctrines concerning so-called accidental hæmorrhage preceding the birth of the child, he boldly challenges the expediency of the practice of rupturing the membranes. He believes, first, that rupture of the membranes does not meet the indications—*i. e.*, it does not in itself or in its results offer any reasonable probability of checking the hæmorrhage—and secondly, that the method is highly dangerous from the increase of facilities, for loss of blood,

and because it adds to the difficulty and danger of the proper subsequent steps in treatment. As to whether it really does check hæmorrhage, it can not do so unless a decided decrease in uterine bulk can be secured and maintained thereby. There must, therefore, be a considerable number of cases in which, a small amount of liquor amnii being present, and the reduction in size being very slight after its escape, no benefit can accrue. In cases which present an average amount of amniotic fluid, after its evacuation the uterus is decidely, though not greatly, diminished in size.

What is to show, however, that this decrease is sufficient to close the mouths of bleeding vessels? There is no practitioner who can not affirm that alarming hæmorrhage does often threaten after the birth of the child, and before or after the complete separation of the placenta, when the uterus is *greatly contracted.* Even this degree in the reduction of bulk fails to close the uterine sinuses in the intervals of contraction. All those writers who advise rupture of the membranes couple with this advice the information that there is danger of continued hæmorrhage. One says, "Of course there is risk," while all suggest methods by which they think a loss and a large accumulation of blood can be prevented after the escape of the amniotic fluid—these suggestions looking toward the maintenance of contraction. Accidental hæmorrhage usually takes place prior to or during the occurrence of infrequent and slight early uterine contractions, when the os is slightly dilated or not at all. Superadded is the condition of collapse. If the liquor amnii is now permitted to escape, can any candid, practical obstetrician admit, the author asks, that there is any known way by which a momentary reduction of uterine bulk can be maintained for a period which will check an alarming hæmorrhage?

The uncertainties and tediousness of efforts at excitation of the uterus in cases of induction of labor, afford a good illustration of the difficulties which would be encountered. Ergot is uncertain and almost valueless, for the stomach will either reject or fail to absorb it; or, if absorption does take place, or if the drug is given by the hypodermic method, its action is imperfect when there has been a great drain upon the vital powers. The abdominal binder can not be applied in a way to crowd the resilient uterine tissue into contraction. Manual efforts can not be kept up with any precision or efficacy during a period necessary

to check the hæmorrhage and keep it in control. Good uterine action can not be excited when the uterus is surprised into labor. Good labor-pains will not occur when the patient is exsanguinated. The suggestion of Leishman, to the effect that the placenta will be compressed between the uterus and the child after the escape of the liquor amnii, and hæmorrhage thus be checked, is, Dr. Partridge thinks, fanciful; for no sufficient uterine action will take place to effect this. There are a great many chances also that the part of the child nearest the placenta would not be one which could make an even, perfect compression, if suitable uterine action did take place. Far from meeting the emergency, the method greatly increases the dangers. If the uterus does not contract promptly, and permanently after the escape of the liquor amnii, an ample space is afforded for a further extravasation of blood. A very limited space will afford room for a dangerous extravasation.

Another danger is from a more extensive detachment of the placenta when the uterus is even temporarily contracted. Another objection to the early removal of the liquor amnii in accidental hæmorrhage is, that an obstacle is created to the use of the most efficient method for securing dilatation of the os—i. e., by dilators. Their use would be improper, lest, acting also as a tampon, they should prevent egress of effused blood, and add to the accumulation. A fourth danger will be from the increased difficulty encountered in the performance of version if the child is not surrounded by liquor amnii. This operation is often imperatively demanded in the treatment of accidental hæmorrhage, under circumstances, too, when its ease of performance is of great importance. There is one class of cases of accidental hæmorrhage in which the amount of blood lost does not fully explain the degree of shock. In these the factors in the production of collapse are the over-distension of the uterus and consequent irritation of the peripheral nerves of that organ, as well as the abstraction of blood from the circulation. Here, then, we might believe, was found sufficient ground for the treatment by early rupture of the membranes, relieving thereby uterine distension and the resulting irritation to the nervous system. Upon consideration, however, we find, first, that it is impossible to prejudge in these cases. It is only *after* delivery, when the amount of effused blood can be estimated, that we discover that the shock was proportionately greater than the hæmorrhage. Again,

collapse brought about in this way, does not obstinately refuse to yield to treatment, but will be remedied usually by the customary measures, such as stimulants, the application of external heat, etc., without the need of any decided local interference. Finally, this variety of the accident is not very common, as indicated by clinical records, the possibility of its occurrence being so lightly regarded as hardly to be mentioned by writers.

What, then, should be the treatment looking toward the safety of mother and child when immediate delivery can not be resorted to, owing to incomplete dilatation of the os? By all means *preserve the membranes intact,* and thus tampon the uterine cavity with liquor amnii. Then, in the great majority of cases, employ Barnes's dilators until the desired result is obtained. Of course, this or any similar treatment must be employed at a suitable time. It must not supersede efforts for the relief of collapse, and it may be necessary to defer all operative measures until the patient can be rallied from the alarming constitutional symptoms. The os being sufficiently dilated to enable delivery to take place, rupture of the membranes is proper, and should be followed by manual efforts to compel the uterus to descend upon the child, whose expulsion should be immediate. Version fulfills the indications better than the forceps, as by the former operation there is less danger from delay during delivery, and because it can be successfully resorted to at an earlier period in the dilatation of the os than the forceps can. Bimanual version should not be considered for a moment, as in cases most favorable it can not always be accomplished, while in this accident the irregularity of the internal uterine surface caused by the collection of blood would certainly interfere with the change of position of the child. During the entire time stimulants must be freely used and warmth to the surface, and in exceptional cases, when the hæmorrhage does not appear to be continuing, it is proper to wait for returning vitality before operative measures are undertaken, lest the condition of collapse be aggravated. The danger is not necessarily over after delivery, for it is often difficult to bring about reaction from the dangerous condition, and convalescence will often be slow.

DISEASES OF CHILDREN.

SUNLIGHT FOR CHILDREN.—The *London Medical Times and Gazette* remarks: "Sir James Paget, in his address at Cam-

bridge last August, suggested as a good subject for a scientific thesis the analogies between a green rose and a rickety child. In our opinion this is the direction in which inquiries must be made if we would solve the difficulties of this really important social question. Bearing in mind the effect of sunlight upon the nutrition and growth of plants, let us ask ourselves whether its privation may not be a most powerful factor in the growth and development of infants. Is it not very probable that an infant under the influence of air and ample sunlight may be able to develop and grow on a diet which, without sunlight, would be insufficient?"—[*Gaillard's Journal.*

ACRANIA MONSTERS.—The comparatively rare occurrence of this form of monstrosity, and the still more infrequent opportunity of post-mortem examination of them, make a case reported by Dr. Emil Mayer, in the *American Journal of the Medical Sciences* for January, 1882, of interest. The body was well developed and very large; the head was small compared with the body, the nose long and flat, the eyelids bulging, and the lips thick and separated. The right ear was fully developed, its lobe lying on a line with the nostril, while the left ear was flat, with its lobe on a line with the mouth; the auditory canals were both normal. Lying directly above the upper lids and the superior portion of the nose, and extending over the whole of the upper surface of the head to the occipital protuberance posteriorly, lay the brain-like tumor, covered by membranes which ran into the hairy scalp on its borders. Anteriorly there were two prominences, between which was a rent made by the finger in delivery. The facial angle was about 60°. There was absence of the whole of the frontal bone, except the orbital and nasal portions, the squamous portion of the temporal bones, both parietal bones, and all the portion of the occipital bone above the protuberance. The medulla seemed to be the only portion of perfect nerve-substance present; no gray cells, or evidence of cerebral brain substance, were present, the tumour being of a connective-tissue character.

MENTAL AND NERVOUS DISEASES.

IS INSANITY INCREASING?—It is a common saying that an increase in the number of insane persons is one of the necessary results of the intensity of modern life. There is certainly a

steady increase in the number of inmates in asylums for the insane, an increase greater than the growth of population would seem to warrant. For this there may be several causes.

1. An actual increase in the proportion of persons of unsound mind in comparison with the entire population.

2. A more general and systematic commitment of insane persons to asylums for protection and medical treatment.

3. A steady accumulation of insane persons owing to the better care of the insane and the consequent lowering of the death rate of such persons.

That the second and third causes are real and potent, is amply sustained by the statistics of our public institutions. The proportion of insane persons at large naturally diminishes with the improvement and multiplication of asylums and the growing popular conviction that neither individual nor public well-being is furthered by allowing the insane to go free, uncared for, and without medical assistance; and as a natural result the number of the insane in asylums increases proportionally.

Accordingly we may have an increase in the number of annual commitments to asylums, as well as in the number of permanent occupants, without any increase in the total percentage of insanity in the country.

Increased efficiency in the medical treatment of the insane may also seem to increase the number of cases as well as the actual number under care at any time. With unskillful treatment many cases of acute mania may result in speedy death, or, what is worse, chronic insanity. In such cases the patient counts but once. With better treatment the patient is ultimately, often speedily, discharged, apparently or really well. The disease is liable to recur, however, and in the course of years the same patient may have to be under treatment several times, each time adding one to the statistics of insanity.

Another fact which tells against the theory that "high pressure" living tends to unhinge the mind, may be found in the source of the larger portion of the inmates of insane asylums. The records of asylums show that most of the insane come, not from the busy professional, mercantile and manufacturing classes, but from those whose lives are a monotonous round of petty drudgery, or, what is equally killing, petty inaction, unfruitful idleness and dissipation. Frivolity probably leads more men

and women to the insane asylum than the hardest and intensest pursuit of mental or material wealth.—[*Scientific American.*

NOSE, THROAT AND EARS.

EXPERIMENT WITH THE EAR.—An experiment illustrating "fatigue" in the sense of hearing (corresponding to fatigue of the retina) has been described by Herr Urbantschitsch. Two tubes are adapted to the ears, and adjusted, so that a given tuning-fork is heard equally on both sides. Now strike the fork strongly, and let it sound a little through one tube; then deaden it somewhat by touching. The ear on that side fails to catch the weakened sound, but on transferring the fork to the other ear, the sound is heard distinctly. If the weaker tone presented be of different pitch from the stronger, it is heard on both sides equally. The failure of sensitiveness in the other case is very transient.—[*Boston Journal Chemistry.*

CATHETERISM OF THE TRACHEA in CROUP.—A correspondent writes to the *British Medical Journal*, June, 25, 1881, that he was called to a girl, 2½ years old, for croup.

It was evident by the pulse, which was about 150 and almost imperceptible, that unless some relief could be given, the end was not far off. The face gradually became pale, and wore a distressed expression, and the lips were of a livid blue color. As the mother objected to tracheotomy, and as emetics, hot bath, and the ordinary routine treatment, had been previously tried, I introduced a large (No. 12) gum-elastic catheter into the trachea, with less difficulty than I anticipated—having first gagged the child's mouth with a cork, for want of something better, and depressed the tongue with a spoon. After a severe paroxysm, she succeeded in getting a pretty good breath, and the next expiration was followed by the ejection of muco-purulent *débris* and sticky phlegm through the tube. In about ten minutes these convulsive efforts ceased—the child, in the meantime, getting a good amount of air into her lungs. In half an hour her face was flushed, but had lost its lividity, and the breathing was fairly comfortable. The tube was retained by tape tied around the child's neck, and was removed twenty-four hours after its insertion; when the temperature had fallen to 100° Fahr. and the pulse to 110. Five days later she was running about the house, not much the worse for her dangerous illness. I observed hardly any difficulty in swallowing liquids after the first two or three attempts, when the tube was introduced.—[*Med. and Surg. Reporter.*

Clinical Reports from Private Practice.

Article XXX.

Epithelioma of Tongue. By Wm. B. Craig, M. D., St. Joseph, Missouri.

In May last, was visited by Miss H.—— of Iowa, who complained of a tumor situated upon the side of the tongue. The growth had been present, but increasing in size for eighteen months or more, and was due, she thought, to either the irritation caused by a ragged carious tooth, or creosote which she placed on the tooth to relieve pain, and which burnt the tongue. However, no doubt remains as to the etiology in such a plain case, carious teeth being such frequent factors in the production of epithelial growths.

Upon examination, this proved to be an epithelioma, occupying the anterior lateral aspect of the tongue. Its posterior border corresponding to the side of the second molar tooth, the left side was clearly defined and the tissue not infiltrated about it. In fact, it seemed a rather favorable case for excision.

Method of Operation.—Placing the patient near a strong light, upon the left side, and administering an anæsthetic, I proceeded, to introduce the usual whip-cord ligature through the tip of the tongue, in order to ensure the complete control over the organ, then passed a curved needle armed with a short carbolized double thread near the center of the tongue, remote from the diseased portion and tied each ligature upon the sides of the tumor in front and behind in a manner similar to ligating a hemorrhoid.

With the knife the tumor was rapidly dissected out. The slight oozing controlled by Monsel's sol., and the edges of the wound united by a smaller suture than the one first used, yet sufficiently large not to readily cut through the tongue.

The patient required only one dose of opium thereafter, and in forty-eight hours the sutures were removed, and the tongue found to be granulating nicely, so that before leaving for home, the tongue presented nearly a normal appearance and contour. She remained just a week in the hospital.

Have heard from her since and she expresses herself as entirely relieved.

ARTICLE XXXI.

SPONTANEOUS DISCHARGE OF GALL-STONES THROUGH THE ABDOMINAL WALL. By HENRY HUMFREVILLE, M. D., of Waterville, Kansas.

On the 20th, of Nov., 1881, was consulted by Mrs. V.—— who, for some time had noticed an enlargement and some soreness just at and a little below the umbilicus; her general health was good—better than for years. About three months before consulting me, she had what her physician termed "inflammation of the membranes of the bowels," and since that time she has noticed a soreness at this spot, but not enough to cause any uneasiness. The enlargement was gradual and it was not caused from any disturbance of the general system it caused, that led her to consult me, but a desire to know the cause and nature of the growth. On examination, a pyriform tumor, base upwards, was found occupying the umbilicalegion,
to the surrounding parts, but manipulation caused no pain. Previous history elicited nothing, and the diagnosis was not freely established at that time.

About two weeks after her visit, her husband informed me that the lump had broken on the outside and was discharging a small quantity of serum; an application of cerate dried up this discharge, and three days later, just at the umbilicus, the tumor become painful and red and had a tendency to point. A flaxseed poultice was applied in the evening, and when removed in the morning, there was attached to it, ten pieces of stone, and protruding from the opening were four more; these her husband picked out and with the balance threw into the coal scuttle. Meeting me on the street, he told me about those queer "stones," and asked that I visit her and see what they were. On my arrival at the house she was still in bed, bnt made no complaint. I found twelve of the stones, and upon examination pronounced them gall-stones. Varying in size from a chestnut to a pea, they all fitted, and judging from the twelve, the entire lump must have been as large as a walnut. Each piece was triangular and

the corners rounded off; they floated on water, and when cut open were of a bright yellow color.

A simple dressing was applied to the opening, which was then about the size of a silver dollar, and discharging freely. It closed gradually, and in a few days she was able to be up. No communication could be discovered, with the gall bladder, and the fistula which was anticipated did not exist, although there is still some discharge and the part is very tender.

That the inflammatory attack of the "membranes of the bowels," for which she was treated prior to the enlargement originated in the gall-bladder, is fully established for these reasons. At no time was there the least indication of jaundice or hepatic colic. The passage of a stone half the size of the smallest passed through this external opening engaged in the cystic duct, would produce paroxysms of pain which could not be mistaken. That the impacted concretions produced an inflammatory action in the gall-bladder, that it extended to the parts adjacent, and an attachment through the process of inflammation and a discharge of the concretions through the abdominal wall was the result No part of the concretion, or in fact any stones, unless very small, ever reached the jejunum, and that there still remains more to be discharged through the same channel,is the only conclusion to be drawn. The effect upon the general system was very slight, none at all, and not enough to excite the patient or her friends, until after the stones had been discharged. At present her general health is good—better than for years—and the soreness around the umbilicus is the only complaint made.

In 1876, the first operation for an impacted gall stone through the abdominal walls was performed, but the patient died; likewise one who was operated on in 1877, and also one in 1878.

Dr. Augner, of France, reports a case in which a spontaneous discharge of one hundred stones, took place through the walls of the abdomen, and the patient (a woman) afterward enjoyed perfect health.

Reports of cases of this nature are rare, and authors say but little on the subject, and consider the prognosis grave. Yet this patient is well, and as able to do her work as any of her neighbors, and unless a fistulous opening should form later by the passage of more concretions; and this is not to be anticipated or expected for some time, perhaps never. It must be considered as remarkable.

Correspondence.

Article XXXII.

Editors Journal:

Some physicians and others of your city and other places, are under the impression that I am associated with the parties in your city operating on animals for the purpose of producing cow-pox virus. Through your widely circulated Journal, I beg leave to state they labor under a false impression, for I am in no manner whatsoever connected the parties. There is a Mr. R. M. Higgins, connected with them who is no Dr.,—being of the same name, the inference with some is that I am the one alluded to when the name is spoken. Theirs is a new enterprise of only a few weeks' existence, whilst I have been engaged, this my seventh year in preparing vaccine on the bovine species, near Manchester Mo., the place where I first began operating. When I change my place of business my many patrons will be duly informed.

This statement is made also in justice to my own reputation, since I am reliably informed that vaccine prepared by these parties, is offered at some of your drug stores as Dr. Higgins' vaccine. Hereafter, each package of 5 quills sent out by me, will have a label on bearing my name and address. I furthermore make this statement in justice to the subject of cow-pox or non-humanized vaccine. You know Mr. Editor, experience is a great teacher, and especially is it so with this subject.

Respectfully,

R. M. Higgins, M. D.

Missouri Vaccine Farm, Manchester Mo.

Obituary.

Article XXXIII.

At a Regular Meeting of the St. Louis Medical Society held January 14, the following resolutions were presented and adopted:

Dr. Isaac Drake McDowell.

Mr. President:

Your committee appointed to prepare resolutions in relation to the death of Dr. Isaac Drake McDowell, report as follows:

Dr. McDowell was born in the city of Cincinnati in the year 1831, and was at the time of his death, fifty years of age. He was the oldest son of the late Professor Joseph Nash McDowell. His mother was a sister of Professor David Drake, of Cincinnati and an aunt to Judge Charles D. Drake, of Washington. He was a brother of Professor John J. McDowell, of the St. Louis Medical College.

Dr. Drake McDowell came to this city in the year 1840, and received his primary education principally in the Public Schools. He was a graduate of the Missouri Medical College; for a time he was Demonstrator of Anatomy in the same institution and was afterwards elected as Professor of Anatomy. He held this position for several years, and was the Dean of the Faculty. After resigning his chair, he engaged in general practice in the town of New Madrid, Mo.

For several years prior to his death he practiced at Hot Springs, Ark. About three years ago he was attacked with serious and complicated diseases of the digestive organs, and which finally caused his death. He died on the 5th, of this month, and his remains were brought to this city for interment. He was buried on the 8th, instant, in the family lot, in Bellefontaine Cemetary.

He was the last of his father's family, and the last of a group of ten children, consisting of five sons and five daughters. He was twice married; the first wife was Miss Provines, daughter

of Dr. Provines of Columbia, Mo., the second, who survives, was Miss La Forge, of New Madrid.

In his career as a teacher, Dr. McDowell displayed talent of a high order, and he was regarded as "a worthy son of a worthy sire." Circumstances, however, conspired to separate him from his chosen sphere, but in his relations as a practicing physician and surgeon, he had the confidence of the profession and community. In view, therefore, of the qualities and attainments of the deceased we respectfully submit the following resolutions.

Resolved, That we record with earnest sorrow the death of our friend and brother. That in his death the profession has lost one endowed by nature with brilliant intellectual powers, a man of fine social qualities, a genial and kind hearted citizen.

Resolved, That we sincerely sympathize with the wife of the deceased, in her bereavement.

Resolved, That this memorial and these resolutions be entered on the minutes of this Society, and that a copy of them be transmitted to the wife of the deceased.

CHAS. W. STEVENS,
S. T. NEWMAN,
G. M. B. MAUGHS,
} Committee.

DR. JOHN W. DRAPER.

The republic of letters acknowledges no defined geographical limits, but wherever throughout its wide domain is found a devotee engaged in the illustration or evolution of the wondrous laws of nature or of philosophy, that one is embraced in the common fraternity and owes a common allegiance.

The death-fall of one who, along life's pathway has erected monuments of his genius, strikes all with surprise; by it a shock is radiated from centre to circumference, and mournful vibrations course along the complex web that binds all in common sympathy. A common sentiment constrains all to give the event fitting recognition and acknowledgement.

Dr. John W. Draper, late of New York City, died in Hastings on-Hudson, N. Y., Jan. 4, 1882. The genius of letters is in tears; assumes the habiliments of woe and proclaims a period of mourning. A kindred impulse reaches and takes possession of the St. Louis Medical Society, therefore,

Resolved, By this Society, that by the death of Dr. Draper,

science and philosophy has lost a zealous votary, an able advocate and a powerful promotor.

Resolved, That, appreciating the eminent talent and exalted achievements of the deceased, this Society shares in the common grief.

Resolved, That, to the family of the deceased and surviving relatives, this Society extends sentiments of sincere sympathy and consolation.

Resolved, That a copy of this action, duly authenticated, be transmitted to the family of the deceased.

F. J. LUTZ,
WM. DICKINSON, } Committee.
M. H. POST,

The following memorial and resolutions were adopted at a regular meeting held, Jan. 21, 1882.

DR. CHARLES SPINZIG.

It becomes our painful duty to announce the demise of an associate member of the St. Louis Medical Society, Dr. Charles Spinzig.

Better than an eulogy, is perhaps a brief sketch of his life, most befitting this mournful occasion.

Dr. Charles Spinzig was born in Hanover, Germany, in 1829; he came to this country in 1852. Wanting the advantage of an early education, he had to engage in the most humble occupation, to earn a support for himself and family. His desire for the acquisition of knowledge grew with every day. Every spare moment was devoted to reading and study, and already in 1856 he felt himself qualified to commence the study of medicine, and in 1858 he obtained the degree of Doctor of Medicine, from the "St. Louis Medical College." He entered at once upon the practice of his chosen profession, which held out to him, as to all true votaries of it, a bright and prosperous career. The war of the rebellion checked for a time his progress. He entered the ranks of the patriots of his chosen country, and served as regimental surgeon during the entire civil war, in Col. Kahlman's regiment.

On the return of peace he resumed his practice. In 1866 he received the appointment of Resident Physician of the City Hospital. An epidemic of cholera was then prevailing in the city.

His opportunities for observation and experiments were good, and he made good use of them.

On the expiration of his term of office, he returned to private life, to hard and successful work in his profession.

His public spirit made itself also known by the great interest he took, and time he devoted to public education. Thrice he was elected, though an independent candidate, to represent the interests of his ward, in the Board of Directors of the St. Louis Public Schools, always defeating the party nominees. He was at last compelled to resign on account of ill-health.

Dr. Spinzig was emphatically, a self-made man. None felt more the want of an early education, and none worked harder to compensate for it. He was an indefatigable, close student, an earnest investigator, and when he once reached a conclusion, he lived up to it unswervingly.

Though engaged in a large and remunerative practice, he was an industrious reader of medical literature and other scientific works. He was a prolific, terse and good writer. His numerous monographs were more read and appreciated abroad than at home. They are original productions—no compilation and no plagiarism.

The following is a list of his most prominent writings:

1. *Variola*, causes, nature, prophylaxis and treatment.

2. *Epidemic Diseases*, as dependent upon meteorological influences.

3. *Cholera*, the laws of its occurrence, non-occurrence and its nature.

4. *Variola*, its cause, nature, prophylaxis and the *danger of vaccination.*

5. *Yellow Fever.* Nature and epidemic character, etc.

6. *Failure of Vaccination*, etc.

These essays on *Variola* and his opposition to vaccination, aroused a great opposition to him, but he was indifferent to the abuses and indignities of his opponents, and that is to say, the whole community. He maintained unflinchingly, his convictions, and lived up to them, which required moral courage far beyond the reach of ordinary men. His professional interest and social standing suffered much on that account. But he felt it his duty to proclaim as errors, those views, which in the pres-

ent century had been regarded as immutable truths. Such a character can only be admired, though it must be regretted that his logic led him to such conclusions.

Such was Dr Spinzig, though derided and ridiculed by many, he was loved and admired by equally as many. The large concourse of patrons, neighbors, friends and citizens at the funeral ceremonies, expresses more eloquently than words, the esteem and love with which he was regarded as their good physician and much honored citizen. Therefore be it,

Resolved, By the death of Dr. Charles Spinzig, this Society has lost a very valuable member; this community a patriotic and good citizen, a friend and promotor of education, a judicious and practical philanthropist.

Resolved, That the sentiments of sympathy and condolence of this Society are extended to the family of the deceased.

Resolved, That the Secretary be requested to send a copy of this memorial to his widow and children.

S. POLLAK,
E. H. GREGORY,
WM. DICKINSON,
CHAS. W. STEVENS,
C. F. V. LUDWIG,
} Committee.

DR. W. DOUGLAS HEMMING.

IT is with a feeling of sadness that we chronicle the sad death of Dr. W. Douglass Hemming, which took place on December, 15, 1881. He had been long suffering from pulmonary phthisis and it suddenly terminated in a fatal attack of hæmoptysis.

Dr. Hemming was a gentleman who was an honor both to himself and the profession. He was an active worker in laryngology, and the JOURNAL and its friends have lost a co-laborer whose future promised a great deal.

PROFESSOR PIROGOFF.

The death of Dr. Nikolaus Pirogoff is announced from St. Petersburg. He was Professor of Surgery to the Medico-Chirurgical Academy in St. Petersburg, and a member of the consulting staff of several hospitals in that city. In 1840, he brought out a valuable treatise on the division of the tendo-Achillis in orthopædic surgery. He also wrote on cholera, on the surgery of the arterial trunks and of fasciæ, and on the medi-

cal aspects of the Caucasus, and on topographical anatomy. His work on this last subject forms a fine atlas of anatomy, as illustrated by frozen sections. It is with military surgery that his name will ever be most closely associated. He is the medical historian of the Crimean and Circassian campaigns; and also wrote a report on the permanent and improvised military hospitals in Germany and Alsace-Lorraine during the war of 1870. The Professor is best known in this country from the operation named for him.—[*Medical and Surgical Reporter.*

DR. BRIQUET.

Within a month of the death of Professor Bouillaud, the Nestor of the Academy of Medicine, the other Nestor, Dr. Pierre Briquet, has passed away at the same age—eighty-six. They resembled each other in their constant attendance at the meetings of that learned body. Indeed, of Dr. Briquet it has been declared that he never missed a meeting since his nomination in 1860. Like Bouillaud, too, shortly before his death he read a memoir, being a kind of supplementary chapter ("Prédisposition á l'Hystérie") to his well-known work on hysteria. He was for a long period Physician to Charité, and wrote on cholera and many other medical topics.—[*Ibid.*

DR. D. WARREN BRICKELL.

The many professional friends of this distinguished teacher will be pained to learn that he died in this city December 11th, 1881, after a lingering illness. In the Feburary number of this journal will appear a biographical sketch from the pen of his friend and colleague, Dr. J. Dickinson Bruns.—[*New Orleans Med. and Sug. Journal.*

Book Reviews.

Article XXXIV.

☞Notice.—In order to secure reviews of books it will be necessary to send duplicate copies of the same. Authors sending reprints will please remit them in triplicate in order to obtain notice in this department. In all cases, where *single* copies of books or pamphlets are sent, a mere acknowledgement of their receipt only will be made.

The Principles and Practice of Surgery. Being a Treatise on Surgical Diseases and Injuries. By D. Hayes Agnew, M. D., LL. D. Profusely Illustrated. Vol. II. 8vo. pp. 1066. (Phila: J. B. Lippincott & Co. 1881.) Price $7.50.

The Second Volume of this valuable work is before us. A review of its contents, confirms the opinion formed from reading the first Volume. On almost every page there is evidence that the Author is a careful painstaking collator of existing knowledge. And yet, his individual convictions, formed from his own observations and experience, are always presented with sufficient force of expression to satisfy the reader that he has written the book in accordance with his conception of right.

His habits of practice are strongly indicated as we pass from subject to subject. While he does not ignore Gamghee's trinity of antiphlogistics—"rest, position and pressure"—he repeatedly recommends evaporation and sedative lotions under such circumstances as will lead the young practitioner to use them to the neglect of the (to our mind) more reliable "trinity."

In the treatment of compound luxation, page 28, Prof. Agnew says: "After it is (the external wound) closed, gentle movement should be made to restore if possible the function of the joint." We do not believe the closure of the external wound by cicatrization can in any sense, indicates the time of beginning passive motion. In regard to the reduction of dislocation of the lower jaw, he repeats the old error as follows: pp. 36–37. "The return of the bone into place is announced by an *audible* sound and it occurs with such *suddenness* and *force*, that unless the operator is careful to shift his thumbs over to the sides of the jaws, they may be severely *contused* between the teeth."

In speaking of dislocation of the cervical vertebræ below the second, pp. 42 and 43, the Author finds "The want of regu-

larity which is noticed in the position of the spinous processes may be seen to exist to some extent also in the anterior surfaces of the bodies of the vertebræ, by examining the posterior wall of the pharynx." We would remark that when the dislocation is sufficiently high to be observed it is much more distinctly observed in the pharynx than in the spinous processes, and also that the deviation in the line of the transverse processes is more appreciable than that of the spinous.

The method of securing a counter-extending force by "placing folded sheets obliquely across the shoulders" in reducing dislocated cervical vertebræ is open to the objection, that the muscles connecting the shoulders to the spine, are thus made tense by holding the shoulders downward—when if the counter-extending force were applied to the loins, the Trapezius and Levator Anguli Scapulæ Muscles would not be forced to resist the extension. Direct pressure upon the displaced bone can be of little use, for so soon as the projecting parts of bone are disentangled by extension, the extending force will be sufficient to replace the displaced portions, and until this disentanglement is accomplished no amount of direct pressure can avail.

In compound dislocation at the elbow, the Author advises partial resection, i. e., "to remove the projecting ends of the ulna and radius so that they can be easily replaced and will lie easy and free from all pressure within the wound." In backward compound dislocation the lower end of the humerus projecting through the wound made by itself it can hardly be desirable to resect the lower end of the humerus, since this would leave a comparatively narrow end of humerus for the formation of the new joint. It may also be remarked that in all compound dislocations of the elbow, made compound by the bone perforating the skin, reduction is very easy, and there is never that tension on the reduced bones so objectionable in compound dislocation of the ankle joint; and hence, less propriety in resection than in the latter joint.

The radical position expressed thus: "*Excisions of the elbow joint.*" "The conditions demanding excision of this articulation are as follows: *First* compound luxation with protrusion of the articulatory extremity of one or more bones of the joint," by the Author is one which, if its teachings are strictly followed, will I am sure lead to resection in cases that may recover with better joints without resection.

We are pleased to note that the Author recognizes the possibility of primary inflammatory changes in cartilage. Much nonsense has been written about the necessary primary involvement of the bone or synovial membrane before cartilages suffer inflammatory changes. Much stress has also been placed on the absence of bloodvessels in cartilage, as an explanation of the error that cartilage never becomes primarily involved in inflammation, that one would be led to suppose that cartilage in the

matter of its blood supply, differed in kind rather than in degree from other tissues. It is so often spoken of in this connection as an extra-vascular tissue, that one would be led to infer that authors regarded it as the only extra-vascular tissue.

On page 841, we find Dr. A. holds that hæmaturia may be caused by "the forcible pressure of the viscera by the abdominal muscles against the emulgent veins so as to cause congestion and rupture of some of the renal vessels." We confess we have not the acuteness to perceive that the pressure by the abdominal muscles through the viscera will be greater on the emulgent veins than on the kidneys—and to our mind such pressure would diminish the liability of rupture of veins —when as if the pressure of the vessels were robbed of the support of the abdominal muscles the danger of rupture of the vessels of the kidneys would be increased.

Enumerating the causes of lateral curvature of the spine Prof. Agnew omits perhaps the most frequent cause—pleuritic inflammation.

The volume as a whole and indeed, in its several parts is most excellent, and is a safe guide in the practice of surgery

JNO. T. HODGEN.

ANTISEPTIC SURGERY. The Principles, Modes, Application and Results of the Lister Dressing. By DR. JUST LUCAS-CHAMPIONNIERE. Translated from the Second and Completely Revised Edition, with the special permission of the Author and Editor, by FREDERIC HENRY GERRISH, A. M., M. D. 12mo. pp. 239. (Portland, Me.: Loring, Short & Harmon, 1881.) Price $2.25.

Although Listerism has received several staggering blows lately, there is no doubt whatever, that it has achieved a revolution in the treatment of wounds. The author of this volume is enthusiastic over the method, and to him belongs the honor of having first made it distinctly understood in France. The author has, perhaps, too much faith in Lister and Listerism, still he has had a large hospital experience, and has used in with great success. His description is a clear and pleasing *exposé* of the manner of using, and the cases adapted to Listerism, from his point of view, and is withal, a very valuable work to read. This is, we believe, the first book published in America, on antiseptic surgery, and on that account should be read by all who expect to treat wounds.

The author has not entirely divested himself of certain French phrases which crop out here and there, and show that it is rather a literal than an easy, flowing, liberal translation. However, it

all clear, and if he has sometimes failed to be elegant, he never ceases to be clear.

The mechanical work is unexceptional.

TRANSACTIONS OF THE MEDICAL SOCIETY OF NEW JERSEY. 8vo pp. 306. (Newark, N. J.: L. J. Hardham, Printer, 1881.)

This is a very neatly arranged volume abounding in good papers. The President's address is on Pleural Effusions, with special Reference to Pyo-Thorax. Then follows a Twenty-Five Years' Review of the Society of Dr. Stephen Wilkes.

An Essay on Laceration of the Cervix Uteri, by Dr. G. H. Balleroy, and one on Eye Affections from Malarial Poisoning, are followed by the report of the Standing Committe, in which a review of the most interesting matters in the State, connected with medicine, are given.

Obituaries of ten dedeased members, are next in order, and then come the Reports of District Societies. These are replete with practical points and are clear and brief. Some very interesting papers find their places among these.

The interest taken in the Society may be judged from the fact, that only four counties were not reported upon at this meeting.

FAVORITE PRESCRIPTIONS OF DISTINGUISHED PRACTIONERS, with Notes on Treatment. By R. W. Palmer, A. M., M. D. 24mo. pp. 121. (New York: Bermingham & Co. 1881.)

Of course, we are opposed to the blind following of formulæ even if given by the best of authors or practitioners. It, in a measure, destroys the self-reliance and habit of thinking for himself, which every young practitioner should acquire.

On the other hand, there is this advantage, that the methods of successful practitioners may be learned and ideas be suggested.

The above is a good compilation, and if read in the proper manner, cannot fail to be of benefit. Certain of the prescriptions are so well compounded that they could hardly be improved upon, yet we connot refrain from regarding the adoption of these by the unsophisticated reader, as empiricism in its most narrow sense.

THE COMPEND OF CHEMISTRY, with which is included a Second and Revised Edition of the "First Step to Chemical Principles." By HENRY LEFFMANN M. D. 18mo. pp. 160 (Philadelphia: C. C. Roberts & Co., 1881) Price $1.00

This is a handy little book for those who need such things as "compends." Dr. Leffman has acquitted himself well of his task;

but we cannot approve of these quasi labor-saving books, which in reality, tend only to give the student enough superficial knowledge to pass an examination.

LANDMARKS MEDICAL AND SURGICAL. By LUTHER HOLDEN, assisted by JAMES SHUTER, M. A., F. R. C. S. From the Third English Edition, with Additions by WILLIAM W. KEEN, M. D. 12 mo. pp. 148. (Philadelphia: Henry C. Lea's Son & Co., 1881. St. Louis: St. Louis News Co.)

There is little need of commendatory remarks for this little volume. Since 1876, it passed through three Editions and is a help of the greatest value. The additions and hints of Dr. Keen are good and always to the point. This small volume will always make friends far itself, its chief merit lying in its intrinsic value.

Books and Pamphlets Received.

ARTICLE XXXV.

The Diagnosis and Treatment of the Diseases of the Eye. By Henry W. Williams. A. M., M. D. 8vo. pp. 464. (Boston: Houghton, Mifflin & Co., 1881. St. Louis: St. Louis News Co.) price $7.00.

Annual Report of the Supervising Surgeon General of the Marine Hospital Service of the United States for the fiscal year 1881. 8vo pp. 247. (Washington: Government Printing Office, 1881).

Necrocis and Elimination of almost the whole Bony Apparatus of Hearing in almost Complete Form. Recovery. By S. Pollak, M. D. (Reprinted from the *Archives of Otology*, Dec. 1881.)

The United States vs. Charles J. Guiteau. Testimony of Dr. Fordyce Barker.

Mansills' Almanac of Planetary Meteorology, etc. By Richard Mansill. 8vo. pp. 48., price twenty-five cents. Published by R. Mansill, Rock Island, Ill.

A Manual of Ophthalmic Practice. By Henry S. Schell, M. D. With fifty-three illustrations. 12mo. pp. 263. (Phila: D. G. Brinton. 1881. St. Louis: Hugh R. Hildreth, Printing Co.)

The Physician's Clinical Record for Hospital and Private Practice; with Memoranda for Examining Patients, Temperature Charts, etc. (Phila: D. G. Brinton, 1881. St. Louis: Hugh R. Hildreth Printing Co.)

WOOD'S LIBRARY OF STANDARD MEDICAL AUTHORS:

A Treatise on Albuminuria. By W. Howship Dickinson, M. D. Cantab. Second Edition, 8vo. pp. 300. (New York: Wm. Wood & Co. January, 1881).

A Treatise on the Materia Medica and Therapeutics of the Skin. By Henry G. Piffard, A. M., M. D. 8vo. pp. 351. (New York: Wm. Wood & Co. February 1881)

A Treatise on Diseases of the Joints. By Richard Barwell, F. R., C. S. Illustrated by numerous engravings in wood. Sec-

ond Edition revised and enlarged. 8vo. pp. 463. (New York: Wm. Wood & Co., March 1881.)

A Treatise on the Continued Fevers. By James C. Wilson, M. D. With an introduction by G. M. DaCosta, M. D. 8vo. pp. 365. (New York: Wm. Wood & Co., April 1881.)

A Medical Formulary based on the United States and British Pharmacopœias, together with numerous French, German and Unofficial Preparations. By Laurence Johnson, A. M., M. D. 8vo. pp. 402. (New York: Wm. Wood & Co., May 1881.)

Clinical Lectures on the Diseases of Old Age. By J. M. Charcot, M. D. Translated by Leigh H. Hunt, B. Sc., M. D., with additional lectures by Alfred L. Loomis, M. D. 8vo. pp. 280. (New York: Wm. Wood & Co., June 1881.)

A System of Surgery, Theoretical and Practical. In Treatises by various authors. Edited by T. Holmes, M. A. Cantab. First American, from second English edition, thoroughly revised and enlarged. By John H. Packard, A. M., M. D., asisted by a large corps of the most eminent American Surgeons. In three volumes, with many illustrations. Vol. II. 8vo. pp. 1063. (Phila: Henry C. Lea's Son & Co., 1881. St. Louis: J. H. Chambers & Co.)

The Opium Habit and Alcoholism. A Treatise on the Habits of Opium and its Compounds; Alcohol; Choral-Hydrate; Chloroform; Bromide of Potassium; and Cannabis Indica, including their Therapeutical Indications, with Suggestions for treating various Painful Complications. By Dr. Fred. Heman Hubbard. 12mo. pp. 259. (New York: A. S. Barnes & Co.) price $2.00

Indigestion and Biliousness. By J. Milner Fothergill, M. D. 8vo. pp. 89. (New York: Bermingham & Co.) price 35 cents. No. 4. Library of Medical Classics, Oct. 15, 1881.

Practical Observations upon Certain Intra-Ocular Affections, Fatal to Vision unless Early Detected and Appropriate Treatment adopted. By Wm. Dickinson, M. D. (Reprint trom *St. Louis Courier of Medicine*, Dec. 1881.)

Ninety-Ninth Annual Catalouge of the Medical School of Harvard University, 1881–1882.

Annual Announcement of the Medical Department of the Minnesota College Hospital, Minneapolis, Minn. 1881–1882.

Bericht über die Dreizehnte Versammlung der Ophthalmologishen Gesellschaft, Heidelberg 1881. Redigirt durch F. C. Donders, W. Hess und W. Zehender. Beilageheft zu den *Klinischen Monats blättern für Augenheilkunde.* XIX Jahrgang 8vo. pp. 199. (Stuttgart: Ferdinand Enke, 1881.)

Sensation and Pain. By Charles Fayette Taylor, M. D. A Lecture delivered before the New York Academy of Science, March 21, 1881; being one of the public course for 1880–81. 24mo. pp. 77. (New York: G. P. Putnam's Sons, 1881. St. Louis: Hugh R. Hildreth Printing Co.) price 75 cents.

Aids to Rational Therapeutics. By J. Milner Fothergill, M. D. M. R. C. P. 32mo. pp. 121. (New York: G. P. Putnam's Sons. 1882. St. Louis: Hugh R. Hildreth Printing Co.) Price paper, 25 cents; cloth, 50 cents.

Address delivered at the dedication of the Hall of the Boston Medical Literary Association, on Dec. 3, 1878. By Oliver Wendell Holmes, M. D., President. Report of C. P. Putnam, M. D., etc. 8vo. pp. 39—18. (Cambridge: Riverside Press. 1881.)

Obstetric and Gynæcological Literature, 1876–1880. By James R. Chadwick, M. D. (Reprinted from the *Boston Medical and Surgical Journal* for Sept. 8, 1881.)

Removal of a Cyst of the Pancreas, weighing Twenty and One-Half Pounds. By Dr. N. Bozeman. (Reprint from the *N. Y. Med. Record* for January 15, 1882.)

Moral (Affective) Insanity. A Plea for its Retention in Medical Nomenclature. By C. H. Hughes, M. D. (Reprint from the *Alienist and Nenrologist*, Jan. 1882.)

Outline Therapeutics of Chronic Alcoholism. By C. H. Hughes, M. D. (Reprint from the *Alienist and Neurologist*, Jan., 1882.)

Aids to Diagnosis. Part III. What to ask. By J. Milner Fothergill, M. D., M. R., C. P. 32mo. pp. 66. (New York: G. P. Putnam's Sons. 1881. St. Louis: H. R. Hildreth Printing Co.,) price 25 cents.

Medizinische Jahrbücher. Herausgegeben von der K. K. Gesellschaft der Ærzte. Redigirt von Prof E. Albert, und Prof. E. Ludwig, Jahergang 1881. II. Heft. 8vo. pp. 290. (Wien: Wilhelm Braumüller. 1881.)

A Case of Prolapse of the Laryngeal Sac. By J. Solis Cohn, M. D. (Reprinted from the *Archives of Laryngology*, January 1882.)

External Perineal Urethrotomy. By Thos. H. Hammond, M. D. (Reprinted from the *Ohio Medical Journal*, January 1882.)

Report on Diphtheria. By Franklin Staples, M. D. 8vo. pp. 44. (Extracted from Annual Report of State Board of Health of Minnesota.)

News Items.

Article XXXVI.

Prospect of A Libel Suit.—Some weeks ago a ripple was created in medical circles by the publication in the New York *Medical Record*, of a statement to the effect that the Illinois State Board of Health had passed a resolution to the effect that the Board would not recognize the diplomas of the College of Physicians and Surgeons of St. Joseph, Mo. Immediately Dr. Geiger, a member of the faculty and secretary of this institution, wrote to the secretary of the Illinois Board, and received the following:

Illinois State Board of Health,
Springfield, Ill., Office of Secretary,
December 23, 1881.

Dr. Jacob Geiger, College Physicians and Surgeons, St Joseph, Mo.—Dear Sir: Yours of the 22d. inst. has been received, and in reply would say that the Board, at its last regular meeting, refused to recognize the diploma of the College of Physicians and Surgeons of Joplin, Mo., and not your College. I do not know how the mistake was made in the New York *Record*. Very Respectfully,

John H. Rauch, M. D., Secretary.

It is said the faculty of the College will demand an explanation at the hands of the editor of the *Medical Record*, and if satisfaction is not obtained in this manner, it is probable that an action will be commenced for libel. The gentlemen of the faculty rank high in the profession, and are all graduates of first class medical colleges. They seem earnest in their efforts to qualify their students for the practice of medicine and surgery, and have received much encouragement at home and abroad. Since the school was chartered, in 1879, it has had one hundred and thirty-four students, twenty-eight of whom have graduated, and now enjoy a lucrative practice. The *Record's* statement will prove alike injurious to the professors in the school, the graduates and the students.

NEW JOURNALS:

THE *Minnesota Medical Mirror* is a monthly of ten pages, which has made its appearance in Cambridge City, Minn. The Editor and Proprietor promises to enlarge it.

THE *Medical News and Abstract* has ceased to exist, and its place is supplied by the *Medical News*, a weekly of thirty-two pages. Judging from the initial number, it is destined to spring into popularity at one bound, as it contains good matter and a great deal of it. We suppose Dr. I. Minis Hays is retained as editor.

THE *American Medical Digest* is a monthly of forty-eight pages which has just risen above the horizon. It purposes to be similar in aim to the *London Medical Record*, and we hope that it will equal that journal's high standard of excellence. The *Digest* is published by Dr. Jno. C. Lester, at $3.00 per annum. As to its future success, but little can be predicted, as medical literature teems with similar publications, and "the survival of the fittest" will decide the life of each.

ANOTHER aspirant for favor is the *American Medical Weekly*, edited and published by Dr. E. S. Gaillard. Formerly the *Bi-weekly*, the publisher has changed its appearance to a weekly of twenty eight pages, and published at the low price of $2.00 per annum. The make-up is the same as that of *Gaillord's Monthly* and it is certainly a cheap medical periodical at the price at which it is now offered.

The Missouri Valley Medical Journal, is a new monthly of fifty-four pages, edited by Drs. W. C. Boteler and F. C. Hoyt, and published at St. Joseph, Mo. It is issued in order "to fill an evident vacancy in this valley, in journalism, and present to the profession, from time to time, an accurate résumé of medical and surgical progress."

The first number of an *Ephemeris of Materia Medica, Pharmacy, Therapeutics and Collateral Information*, has been received. It is a monthly of thirty-two pages, by Edward R. Squibb, M. D., Edward H. Squibb S. B., M. D. and Charles F. Squibb, A. B. The locality of its publication is Brooklyn, N. Y., and it will no doubt prove valuable to manufactueing chemists and pharmacists

WE told you so! Brother Gaillard. It seems that your con-

fessional was not exactly what your subscribers desired to contribute to, and so they have left it to languish. They say *peccavi*, but they do not seem to care to say it loud enough for others to hear of it. We were surprised to see that the confessional was "not only closed, but completed!!" (!). But we can bear the loss of this department, as the others have so many good things in them.

DENVER is a city which, in the last few years, has grown marvelously and will compare favorably with many cities of a much older and larger growth. It is above all, enterprising, as is evinced by the "annual" of the *Denver Tribune*, which we have received. It is the New Year's supplement, and consists of thirty-two pages, profusely illustrated, and giving a picture of Denver, such as cannot be found in any other periodical. It is a good specimen both of typographical and editorial work It is a complete review of the mining, agricultural and industrial interests of Colorado. All the prominent towns in the State get their share of attention, as also all the counties of the State.

THE Black Hills Medical Association held its first annual reunion at Central City on the evening of Jan. 4. The occasion is spoken of as one of general good feeling, and numerous speeches were made. This is the only medical society in Dakota, and its membership at present only includes physicians of Lawrence Co., although not confined to such narrow limits. Dr. Houghton has the honor of being its first president.

THE annual election of the St. Louis Medical Society, which took place Jan. 7, resulted as follows;

President: Dr. Wm. Dickinson; Vice-President: Dr. Edw. Borck; Recording Secretary: Dr. A. H. Ohmann-Dumesnil; Corresponding Secretary: Dr. G. F. Dudley; Treasurer: Dr. W. E. Fischel.

It is quite a noticeable fact that the President and Vice-President are specialists, the former being an occulist and the later exclusively devoted to surgery. Verily, the specialist is being noticed in the land.

HOSPITALS LIABLE FOR MALPRACTICE.—It is stated in the *New York Med. Jour.*, that a pay patient of the Rhode Island Hospital sued to recover damages because of a hemorrhage leading to gangrene and amputation, due, it was alleged, to the malprac-

tice of an *interne*. During the suit, the following statement of the legal liabilities of hospitals was made:

1. A hospital is not exempt from liability for unskillfulness or neglect, but is responsible for the exercise of reasonable care by the governing authorities in selecting physicians, surgeons and *internes;* and if incompetent persons are appointed, is responsible for the results of their neglect or want of skill.

2. If the rules of the hospital require that in specified cases an *interne* shall summon an attending surgeon, and the *interne* fail to do so, the corporation may be liable for the consequences of his neglect.—[*Louisville Med. News.*

A lady visiting a friend just confined

ST. LOUIS MEDICAL COLLEGE

The Post-Graduate Course of Lectures of the St. Louis Medical College will be held during the Spring Session in the month of April and continue four weeks.

The Clinical Material at the command of the College will be utelized; this includes not only the Clinics at the College Dispensary, the St. Louis Hospital, the St. Luke's Hospital and the City Hospital, but also the material at the U. S. Marine Hospital, the Alexian Brothers Hospital and the Female Hospital.

Selected subjects in Medicine, Surgery and the Specialties will be presented in didactic lectures by competent men.

Anatomical material in abundance. Fee $30.00

For further information and circular apply to

JOHN T. HODGEN, M. D., 500 N. Jefferson Avenue, St. Louis.

The spring course of lectures for students begins March 13th. 1882.

REGULARS AND [illegible]

Hospital (the large public hospital) in Chicago is to [illegible] in part, under the professional control of the homœopaths—at least it has been so voted by the County Commissioners, which is the governing body of the institution. Only a part of the hospital is to be turned over to the homœopathic profession, the remaining portion, it being intended, shall remain under the present medical management.

The arguments that were considerad by the Commissioners in taking this step were, that a large portion of the taxes were paid by patrons of homœopathy who desired to have that school represented in the hospital management, and that there was reason to hope that under homœopathic management the expenses of the medical department would be reduced. One of the two rival colleges of homœopathy has recently built a college building directly opposite the hospital.—[*N. Y. Med. Record.*

THE VIRCHOW TESTIMONIAL.—The German medical and scientific fraternity, are contributing toward a fund in celebration of the twenty-fifth year of Virchow's professorate, to form a means for the promotion and furtherance of scientific research, bearing especially on the study of man.—[*The Med. and Surg. Reporter.*

THE SMALL-POX.—The tendency of this plague to become epidemic on the Pacific Coast continues to be manifest. Of late the disease has been more common in parts of Washington Territory and Oregon than in California. There can scarcely be a doubt that it would have gained a dangerous foothold in California but for the prompt resort to isolation and vaccination, chiefly adopted through the vigilance of Boards of Health and individual members of the profession.—[*Pacific Med. and Surg. Jour.*

DR. FRANK J. LUTZ, as previously announced in the JOURNAL, went to Columbia to deliver a series of lectures on the surgery of the abdomen. His lectures, thirteen in number, were addressed to the students of the medical department of the State University, and were not only very instructive but very interesting both to the students and professors. Dr. Lutz was well received at the University and by the citizens of Columbia, and he has brought back with him, pleasant reminiscences of that hospitality tended to him. He was also highly gratified at the genial and pleasing manner in which his efforts were received, and altogether he is well pleased with his trip.

METEOROLOGY OF 1881, BY DR. A. WISLIZENUS.

Month.	Therm. F. Mean. of Month.	Date.	Highest Mean.	Date.	Lowest Mean.	Rain and Snow in Inches.
January	20.4 F	30	46.5 F	14	−7.0 F	0.45
February	30.9	28	61.5	16	7.0	4.23
March	40.2	24	65.5	5	22.0	1.83
April	52.1	25	85.0	1	25.0	2.77
May	72.0	12	90.5	3	43.5	3.32
June	76.3	16	96.0	22	55.0	2.76
July	80.5	10	101.5	1	63.5	1.65
August	83.5	12	104 0	15	65.5	0.24
September	76.7	5	100.0	16	50.5	3.08
October	62.5	8	85.5	20	43.5	7.13
November	43.0	1	69.5	24	16.5	5.33
December	40.8	12	61.5	30	18.0	1.48
Year's mean temp.	56.7		Total quantity of rain and snow, 34.27			

For comparison I add here the mean temperature and quantity of rain in St. Louis from Dr. Engelmann's observations for thirty years :

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Mean temp. F.	32.4	35.3	44.4	56.1	66.3	74.4	79.0	76.5	69.4	55.8	43.4	33.8	53.6
Quantity of rain	2.14	2.66	3.81	3.96	4.94	5.66	4.17	4.15	3.25	3.39	3.16	3.16	44.46

REMARKS.

Our climate in the centre of the Mississippi Valley is justly called an excessive one. As in the different seasons we often suffer from the extreme cold or heat, so the different years exhibit sometimes a surprising irregularity, from which only in the lapse of ten or more years, a mean regularity and normal constant can be deduced. As such a year of great irregularity, we must consider the past one of 1881. The beginning of the year coincided nearly with the middle of the most obstinately severe winter I have experienced in St. Louis, that began in November and December of 1880, and was continued for three months longer in 1881. The mean temperature of the first four months of the year 1881, was therefore far below the normal one; while the normal temperature of these four months amounts to 168.2 degrees Fahr., it reached in the year 1881, 143.5, or 24.6 less. Consequently the spring was late and short. Vegetation was delayed about a month. Many fruit trees were killed by frost. But in May the whole scene was changed. From May up to the end of the year the repressed heat of the sun did its utmost to make up for the lost time. While the normal mean temperature for these eight months is 498.6 degrees F., it rose now to 535.4 or 37.7 more than the mean. This considerable and sudden increase of temperature would not have acted so injuriously on vegetation, had it been accompanied by corresponding rains. But these precipitations of moisture occurred very sparingly and were very unequally distributed. The quantity of rain during the whole year of 1881 (34.27 inches) was about ten inches less than the normal mean one, (which is 44.45 inches). The four months from May to August, during which about nineteen inches of rain fall usually, showed only a rainfall of about eight inches, and in the uncommonly hot month of August, only a quarter of an inch was precipitated The effect of this excessive heat and drought was most destructive to crops. Vegetables and corn dried up, fruit fell unripe from the trees. The vineyards only, in which on account of the dryness, no rot was developed, yielded a moderate return. From the end of September until November, considerable quantities of rain fell at last, about fifteen and a half inches, but too late in the season to do much good for this year.

The fall was on the whole very pleasant, and December so mild that it represented our "Indian summer," more than a winter month. Our winter has apparently adjourned till after New Year, and will in all probability be much shorter and milder than the last.

METEOROLOGICAL OBSERVATIONS.

By A. WISLIZENUS, M. D.

The following observations of daily temperature in St. Louis are made with a MAXIMUM and MINIMUM thermometer (of Green, N. Y.). The daily minimum occurs generally in night, the maximum at p. m. The monthly mean of the daily minima and maxima added and divided by two, gives quite a reliable mean of the monthly temperature.

THERMOMETER, FAHRENHEIT—DEC., 1881.

Day of Month.	Minimum.	Maximum.	Day of Month	Minimum.	Maximum.
1	34.0	43 0	18	40.0	53.5
2	32.5	41.5	19	42.0	58.5
3	40.0	43.5	20	48.5	52.5
4	38.0	39.5	21	46.0	51 5
5	30.0	40.5	22	32.5	43.5
6	39.0	54.0	23	37.0	40.5
7	32.5	39.5	24	31.5	40.0
8	34.5	51.0	25	34.5	47.5
9	36.5	42.0	26	36.5	49.0
10	29.0	40.0	27	37.5	42.5
11	34.0	40.0	28	39.5	56.5
12	43.0	61.5	29	36.0	43.5
13	55.0	61.0	30	18.0	28.0
14	30.0	38.0	31	25.0	30.5
15	29.0	42.5			
16	33.5	49.0	Means	35.8	45.8
17	37.5	52.5	Monthly Mean.	40 8	

Quantity of rain and snow, 1.48 inches.

MORTALITY REPORT.---CITY OF ST. LOUIS.

FROM NOV. 5, 1881, TO NOV. 26, 1881, INCLUSIVE.

Small Pox	0	Childbirth	12	Convulsions & Trismus Neonatorum	39	Syphilis	3
Scarlatina	10	Inanition, Want of Breast Milk, etc.	12	Hydrocephalus and Tub. Meningitis.	6	Apoplexy	12
Pyæmia & Septicæ	5	Alcoholism	5	Meningitis & Encephalitis	12	Dis. fem. gen. org.	1
Erysipelas	0	Rheumat'm & Gout	0	Other Diseases of the Brain and Nervous System	22	Surgical Operation	0
Diphtheria	22	Cancer and Malignant Tumor	12	Cirrhosis of Liver and Hepatitis	22	Premature Birth	0
Membran's Croup.	8	Phthisis & Tuberculosis, Pulmon	17	Enteritis, Gastro-Enteritis, Peritonit, and Gastritis'	20	Deaths by Suicide	2
Whooping Cough.	2	Bronchitis	8	Bright's Disease and Nephritis	8	Deaths by Accid't	1
Ovarian tumor	0	Senility	14	Other Diseases of Urin ary Organs.	1	Deaths by Homicid	4
Measles	1	Pneumonia	40	Diabetes	0	Congen Defor'ty	2
Typhoid Fever	32	Heart Diseases	27			Total Deaths from all Causes	631
Cerebro Spinal Fev	2	Other Diseases of Respir'y Organs	8			Total Zymotic Diseases	201
Remittent, Intermittent, Typho-Malarial, Congestive & Simple	1	Heat Stroke	0			Total Constitutional Diseases	141
Contin'd Fevers,	44	Marasmus—Tabes Mesenterica and Scrofula	27			Total Local Diseases	220
Puerperal Fevers	1	Other Const. Dis	8			Total Develop'tal Diseases	41
Diarrhœal Disea's	48					Deaths by Viol'ce	28
Other Zymotic Diseases	6						

CHAS. W. FRANCIS, *Health Commissioner.*

Original Contributions.

ARTICLE XXXVII.

SURGICAL MALPRACTICE.* By A. M. POWEL, M. D., of Collinsville, Ill.

The increasing frequency of the allegations of malpractice in surgery, makes this subject one of great interest to nearly every physician, especially to those practicing in the rural districts, deprived as they are of the aid a nd counsel of expert surgeons While it is doubtless true that, in some cases, negligence or inexcusable ignorance on the part of the physician is blameable with bad results in surgery; yet, as a rule, those practicing the art are quite as successful as are the artisans in other walks of life. It may, therefore, be worth while to notice the chief causes leading so frequently to vexatious litigations and still more frequently to annoying threats of prosecution for alleged neglect or incompetency of the practitioner in treating surgical injuries.

Perhaps the primary cause is found in the fact that the popular mind expects too much of art. The laity it seems, cannot realize the fact that nature, with all the assistance that art gave her, never restores injured or destroyed parts to a state of absolute integrity. Hence, the shortening of a broken bone, the deformity of an injured part, or a remaining cicatricial mark is a source of dissatisfaction to the popular mind, and is an incentive to charge upon the surgeon all sorts of direlictions. This popular tendency is constantly kept alive and often fanned into a flame by the ignorant pretenses of those members of the medical profession who are rightly denominated charlatans and quacks, whether they be "regular graduates" or no graduates at all. These gentry are very commonly loud in their denunciation of the assumed shortcomings of their neighbors and equally loud in their assertions of the superiority of results that might have been expected had the cases been entrusted to *their* hands. Or if not thus loud in their averments, a less ingenious course is taken by resort to sinister remarks by spoken or acted innuendo,

* Read before the Madison Co., Medical Society, Oct. 25th, 1881.

and by other of those dishonorable little arts so common to that class of men, arts so easily recognised, but so hard to be met and overcome by honorable gentlemen. The ignorance of the popular mind on all medical subjects necessarily begets the prejudices of the people against the profession. This is evidenced by the commonly expressed opinions of the masses, and more particularly by the tone of the newspaper press—for how seldom do the public prints accord to the profession a moiety of that honor and respect due to it. The public mind is constantly trained to expect no good thing to come out of the Nazareth of the medical world, while the unfortunate dissensions among the votaries of the healing art, like those among teachers of religion, are well calculated to make sceptics of the masses.

The various facts above alluded to, when conjoined, bring about a condition of things favorable to the entrance of one of the main factors leading to unjust litigation between physicians and their clients; a factor more potent perhaps, than any other. I allude to the wiley machinations of that most despicable of creatures (excepting only the quack doctors)—the shyster lawyer like the vulture hovering near his prey, he quietly watches for his opportunity to pounce upon the purse of the unwary surgeon, and often after a conspiracy between himself and the creature of allied kind in the medical profession, a conspiracy in which all the elements of "addition, division and hard scouring" are fully entered into, he too often succeeds, assisted by the ignorance and prejudice of a *lay* jury, in filching from honest pockets a fat sum wherewith to satiate his greed. His appeals to the cupidity of his client, coupled with the poison already existing in said client's prejudiced mind is too much for the honesty of many otherwise honest men. If the element of honesty be lacking in the client, then all the better for the shyster's schemes. Another cause of frequent dissatisfaction to the popular mind leading to litigation, and more often to refusal of the patient to meet his pecuniary obligation to the attendant, is the tendency on the part of the surgeon to promise too much. This usually grows out of the exuberant enthusiasm of men who are commonly young and inexperienced; but is sometimes the result of a timidity of the surgeons, who dares not honestly say to his patient or his friends that no human foresight can see the results in his case, and so is led to promise what is often not attained, with consequences disastrous to his surgical fame and sometimes

to his pocket. Another phase of timidity is often exhibited by the attendant in his failure to exact implicit obedience to his requirements, and a full submission by the patient to his judgement as to the necessary procedure. Men often compromise their judgement, and with it their dignity and professional rights rather than relinquish a case on account of obstructions placed in their way by the patient or his friends. This course generally leads to its legitimate result—failure—and should a suit for malpractice follow, a plea that the surgeon was not allowed to do what he considered best, will receive little consideration at the hands of complainant, his attorney, or the average jury. The answer to such a plea will be immediate: the surgeon should have withdrawn from the case when thwarted in his proceeding. Of course, such answer is very difficult to gainsay.

While it is demonstrably true that a majority of the suits brought against physicians and surgeons for malpractice are and unjust, the result of some of the wrongful causes above alluded to, yet occasionally these suits are founded in justice and pretenders and even good physicians are rightfully made to suffer for ignorance or negligence. As long as human nature is constituted as at present, it will, perhaps, be impossible for the profession to guard against and prevent unjust attacks upon the reputation and purses of its members; but a clearer insight than is now possessed by most of us as to what the courts actually require of the profession would tend greatly to protect us against the impositions of designing clients and their unscrupulous lawyers.

There are certain pretty clearly defined principles which have so often been laid down by the courts which are to govern decisions in these cases that they have passed almost into definite laws. I shall briefly notice these, which may be summed up or formulated thus: The possession by the surgeon of a certain degree of learning and skill, and the faithful and diligent application of these, will be required. When the evidence shows that these requirements have been fulfilled by the attendant, he is entitled to acquittal. The surgeon is not to be held accountable in damages for bad results, merely, but only for bad results as a consequence of failure to possess and apply the degree of skill required. What is the degree of skill required? It is defined to be, not sufficient skill to *cure* a given case, indeed, not to *cure* at all; but such degree of skill as is *possessed* by members of the

profession, having due regard to the state of professional advancement at the time and in the vicinity of the case. The standard of skill is to be a practicable and attainable one in view of the current learning of the times, and in the locality. It is not to be measured by the highest degree attained by the most eminent in the profession, neither by the lowest, but it is to be an average skill. Neither is the skill of those located in remote districts, with few opportunities for observation, to be measured by that of those practicing in the great centres of population, surrounded by all the facilities for acquiring unusual attainments by frequent opportunities of observation and practical experience, as well as by the assistance and counsel of those similarly situated. The degree of earning and skill required is not *extraordinary*, but "*ordinary*," keeping in view the era and the surroundings.

So, too, the amount of diligence required is not to be extraordinary, not an unwonted amount of time and labor spent with the patient, or an unusual degree of anxiety and attention applied, but only ordinary, reasonable diligence. Not a sufficient degree of diligence to assure perfect results under all circumstances, but such a degree as will, under ordinary circumstances, obtain ordinary results.

Between any person holding himself out as a surgeon by card or otherwise, or by accepting remuneration for surgical practice, and a person who having received a surgical injury requiring by himself or his representatives and obtaining the services of the one so holding himself out as a surgeon, there is an implied contract to do and to suffer certain things. On the part of the surgeon the contract is to possess and apply a reasonable degree of learning, skill and diligence in treating the injuries of the other party involved, and on the latter's part it is to suffer the surgeon to proceed in what he deems justifiable measures to reach the best results attainable under the circumstances and to this end, to implicitly obey the injunctions and directions of the attendant. Neglect or refusal to do this on the part of the patient, releases the surgeon from responsibility, and he ought, in justice to himself, to claim this by an immediate withdrawal from the case. Want of the required skill on the part of the surgeon or his negligence in applying, subjects him to a just claim for damages,—and this whether the contract specifies a pecuniary consideration for his services, or not. A superficial view of this lat-

ter fact might lead to a demurrer as to its justness; but when it is remembered that presumptively, physicians and surgeons do not practice their profession for pecuniary gain, but for the good of their patient, the justice of such a position is at once recognised. Yet it is nevertheless true that the patient, no matter what the result may have been, (unless it have been bad in consequence of proven want of skill or diligence, or both,) is in honor bound to tender the physician his fee for services performed; and while this is really an "honorarium" *and not pay for services*, the courts will enforce its collection as a matter of equity. No amount of money can repay the practitioner for the responsibility, and the anxiety and the labor incident to his care of a patient. Yet, as his personal and family necessities require the expenditure of means, it is his right to exact an *honorarium*, and the law as before said, will enforce its collection.

Returning to the subject of the requirements of the law, it may be asked how, in a given case, is it to be ascertained whether or not the required skill and diligence has been exercised. This is an important question upon which the whole matter rests. It is not a question of law, but as the jurists term it, a "question of fact," and, like all other questions of fact, is decided by the jury. This statement at once brings into view the absurd injustice of the law in permitting the judgement of a non-professional jury to pass upon a fact requiring professional judgement for its determination. Our bill of rights guarantees to every man when accused, a trial by *a jury of his peers*, yet here we see professional and scientific questions, often involving the very subtletest and nicest distinctions, submitted to the decision of non-professional and unscientific minds, and often to those blinded by the grossest ignorance and prejudice! The only circumstance that can relieve this state of things from the charge of bald, stolid injustice is the fact that expert professional men may be allowed to testify by way of assistance to the jury in determining facts.

In view of the many unjust and vexatious suits brought for alleged malpractice, it becomes a matter of great importance to the profession to seek some means of protection against such injustice. It is not enough to say that, as a rule, the innocent usually escape judgement for damages. There is somthing that any honorable man values infinitely above dollars and cents: his reputation. This can, with perfect impunity, as the law now stands, be attacked and smirched by any irresponsible and design-

ing person, and without any recourse whatsoever, for the injured physician. We all understand that a suit of this kind, however unjust, necessarily works great detriment to the professional reputation of the party sued, no matter how clearly he may establish his innocence of the charge. Justice demands that there should be greater restrictions embodied in the laws, whereby it would be made more difficult to institute vexatious suits, and provision should also be made for the punishment of parties who have, from malice or from motives of speculation, been privy to, or concerned in the institution of such unjust litigation. There is but one way to bring about these desirable changes in the law, and that is by agitation. The medical profession surely is entitled to, and I believe possesses, sufficient influence if we would but exert it, to have framed and passed by our legislative bodies such laws as we are justly entitled to for our protection against the snares of mean and designing speculators against our good name and our purses.

Article XXXVIII.

Criminal Abortion.* By Jno. S. Pearson, M. D., Louisiana, Missouri.

Criminal Abortion presents itself to our consideration under two leading thoughts, to wit: as practiced outside the profession, and secondly, as practiced under the pale of the profession; for we must confess with shame and regret, that there are those who call themselves physicians, with diplomas, and licensed by reputable medical colleges, who lend themselves to this great crime in total perversion of their true mission. The relation of our subject to the former class, comes indistinctly to the physician's notice by a *reflex modus*, and results in profuse hæmorrhages or in broken down constitutions, or in life-time uterine and nervous disorders, entailed in the brutal practice of the base perpetrators of the crime. As to the significance between abortion, miscarriage and premature labor, they are of little import to us in our subject, as they each are the termination of the same process at different periods of development, resulting in the separation and expulsion of the product of conception, either viable or non-viable, and are criminal in design, effect and result, when wilfully and knowingly done, either to avoid the consequenses of wrong-doing, the exposure of former crime, or the inconvenience of child-bearing.

We have in our midst in criminal abortion, an evil of wonderful extent; destructive alike to social and family relations, of unsuspected magnitude, and being practiced on the young, as those more advanced; on the single, as alike the married; by professional and non-professional, whilst the perpetrators and subjects thereof, scarcely consider the crime seriously, but try to evade the idea of criminality or wrong-doing in the act.

The corrupt sentiments, the depraved status of society are in antagonism to child-bearing. Married ladies in the higher, as the lower circles of society oppose having families, it is inconven-

* Read before the Linton District Medical Society, Mexico, Mo., November 8, 1881.

ient, it interferes with their pleasures and visiting, comforts and ease; hence on the first, or at most the second monthly interruption, they seek its restoration by mechanical interference in breaking the continuity of fœtal envelopment; hence abortion and death result therefrom.

Misfortune overtakes one belonging to a respectable family. She has strayed from virtue's path, or the seducer under promise of marriage or otherwise, has despoiled her of her *richest pearl*, her most *precious jewel*, and shame awaits the development. Is it a crime to relieve the wanderer, and restore the fallen back to virtue's path? lost virtue like lost time, never returns. The subject pleads: "I have taken a deep cold, I have missed my periods, cannot you give me something to bring me all right again?" Ah! crime is too often lurking there, and death may in those periods be concealed.

From the country home, from our pleasant villages, from the gay and festive social circles, one and another may be for a season missing, visiting the large cities for the treatment of a *specialist* in her line of trouble; perchance she may be returned a corpse, or perchance a wrecked invalid for life. How many physicians, long in practice, whose ears are strangers to similar facts, and how many turn from the proffered bait?

Or, take the position that abortion done *at any time* from the moment of conception to the full term of utero-gestation with the design of destroying the product thereof, is virtually and actually the taking of life, and hence the foulest and grossest of murders, on whomsoever practiced or by whomsoever done. Is it a crime to produce abortion? Why may I not? Do you ask me is it a crime to meet the possessor of gold and your equal upon the highway, and *slay* him for the gold? Covetousness, thirst for gold, led to and was the incentive to action, to possess yourself of that which belongs to another, induced the *slaying*. Was *it* right? was it no crime? Then tell me, is criminal abortion a single crime?

The product of conception is life; vital processes are ever in progression—the germ itself has life, is a *living being*—the same forces are all in active development from that moment until death; true the conception may have dependent vitality for a term, and independent vitality subsequently; so is all vitality, vegetable or animal, dependent upon these relations; but these

products are alike stages of living animal organisms and their destruction is death and the crime thereof is murder.

The jealous and fearful Tetrarch who sent forth and slew Judea's innocent children, caused keen anguish and sorrow to weeping mothers; but the slayer of the helpless and innocent offspring of the mothers of the nineteenth century is attended by no weeping, no lamentation, no apparent remorse or grief as seen by the human eye; nay, the rather a species of relief and exultation are too often apparent. But if the production of abortion is wrong and criminal by the subjects themselves, and those without the profession, it is doubly vicious in the physician. Why? Let us consider the sphere of the physician—his scope. What is his mission to others in life? What to himself as a reasonable and reflective being? Obligations arise, exist and assert themselves in all the varied relations of life, and are peculiar to each calling therein. The higher, the more responsible and sacred the calling in life, the greater and more sacred the duties and obligations.

The physician's calling is peculiar in that it proposes to protect and preserve human life, and remove as far as human agency is concerned, the ills to which flesh is heir, to alleviate the pain and suffering incident to mankind, and make life more pleasant, desirable and useful. The broken and violated laws of physical organizations daily present themselves for his restorative skill, and his highest aspirations go out for their successful accomplishment. It is contrary to his office to produce pain, and suffering, it is in opposition to his mission to cause disease or to destroy life; for his is preëminently the art preservative—the science restorative. The physician who departs from the sacred obligations of this profession and lends himself to deeds of darkness, death and destruction, arraying himself against the laws of natural life, terminating that life, degrades that profession, stains his hands and character with human blood; and in producing, aiding or abetting knowingly, is worse than the highway robber and murderer, who slays his fellow man for the possession of his goods—nay he is less—worse when a man, for he who commits abortion is the taker of helpless and innocent life, unprotected, unprovoked and without excuse; he kills for the pay he gets, for gold, while the man in the former instance stood some prospect for self-protection and self-defence.

Criminal abortion is a triple crime—by the producer, on the subject, against the being though unborn, yet murdered.

It is a crime against society, against humanity, against the sacred ties of family and kindred, against human government; it is a crime against the All Wise Creator who has declared that "who so sheddeth man's blood, by man shall his blood be shed."

Article XXXIX.

Nervous Shock as a Therapeutical Agent. By Romaine J. Curtiss, M. D., of Joliet, Ills.

[concluded]

Case III.—Master W., aged nine years; when I was called to see him this patient had been ill about three months with hystero-epilepsy. At time of my visit, the left arm was rigid, hand flexed, with almost the appearance of the contracture of paralysis. The left lower extremity was rigid as a stick. During the three months of his illness he had several convulsions or rather series of convulsions, and had taken a great deal of worm medicine. He was taking at the time of visit, ergot and bromide of potassium, the diagnosis being spinal meningitis. I had just read Sayre's report of nervous disease depending on phimosis and cured by circumcision; his theory being that the retained and dried secretions—smegma—above the glans was the source of irritation which originated the nervous disease, and the removal of which by circumcision cured the disorder of the nerves. I naturally examined the penis in this case and found the characteristic long prepuce, phimosis, and I thought I could feel the smegma, the very *corpus delictu* in the case. I recommended circumcision which was declined by the physicians in council, and the parents, pending further consideration.

In the meantime I wrote to Dr. Sayre and to Dr. Hammond, relating to the case. As I expected, I received, very kindly, a letter from Dr. Sayre stating his belief that phimosis was the cause, and circumcision the cure; but Dr. Hammond stated that nobody but Dr. Sayre believed that phimosis ever caused such diseases, or that circumcision ever cured them, that some of Sayre's reported cases were actually Jews; and recommended bromide of zinc. Soon after this the case was turned over to me and I prescribed the bromide of zinc, but could not dismiss the brilliant results of Sayre's operations from my mind. I still felt the smegma, noted the long prepuce, and the phimosis, and

discovered further that whenever the penis was touched, however slightly, an instant erection would follow, of only momentary duration, which could be repeated several times a minute. I was perplexed to know on which end of this cart the horse could be hitched, and "tendon reflex" not then having been invented or discovered as a symptom relating to spinal disease, I was the more unsettled in decision, but decided to make the operation, and remove the source of irritation. On cutting off the prepuce and drawing the stump over the glans I found no smegma as expected. The parts were, in fact, clean. I thought the operation a vexation of spirit, but almost immediately the patient began to improve and in ten days was apparently on the high road to recovery, when he was attacked by facial erysipelas and died.

I do not think now from the further experience I have had in these cases, that the nervous disease affecting the muscles was reflex from genital irritation, but was a centric nervous disease; nor can I account for the rapid improvement following the operation in any other way than that the shock to the nervous system acted therapeutically.

CASE IV.—The causes of dysmenorrhœa are doubtless as complex as the physiology of the function itself, with the added complexities of other incidental diseases. The affection is described as obstructive, or painful from mechanical reasons as flexion, prolapse, and procidentia, from stricture of the cervix, uterine varicose veins, constricted *os tincæ*; congestive, from engorgement of uterus, ovaries or cellular tissue; inflammatory, from various forms of pelvic inflammations; and without doubt many cases of dysmenorrhœa are purely nervous in origin. Much surgery has been performed on the conoidal cervix with contracted os, and much good has been accomplished in relation to dysmenorrhœa even when the result of the operation has been a further contraction of the cervix by cicatricial tissue and a still more elongated pointed cervix, which certainly ought to result in still more dysmenorrhœa if the theory of the cause was correct.

These facts are so generally known that argument and cases are not required for proof. Instances are numerously reported in which bilateral section of the cervix uteri for sterility and dysmenorrhœa has been made, the object being to manufacture a wide patulous *os tincæ*, and the result has been a cicatricial con-

traction of the os, making it smaller than before, while the dysmenorrhœa has been cured. A theory to account for these results is that an inflammatory condition existed previous to the operation which was relieved by the loss of blood, and that the reconstruction so to speak, of the uterus following the operation caused the cure of painful menstruation and sterility. There may be some truth in this theory, though it is not very evident that one such bleeding could cure an inflammation, even if present, nor is there known to be any reconstruction of the uterus following such operation except the cicatrix. In my opinion the generality of these cases so operated on, were of nervous origin, and the operation resulted in a cure by reason of the therapeusis of nervous shock, as in the case of Mrs. B., aged 34 years, married nine years, was sterile, hysterical and had dysmenorrhœa. An examination revealed the conoidal cervix, a small virgin os, no abrasion, no mucus of any account in the cervical canal, and no displacement. Bilateral section of the cervix was the fashion and was made , and, as is the case in all such operations I have ever seen or made, the cervix contracted to such an extent (cicatrices always contract), that I could only with great perseverance and difficulty introduce a small silver probe through the canal. This lady's next menstruation was painless, and in three months she became pregnant, and now has six children. I attended her in three confinements. I believed at the time that the contracted cervical canal was the cause of her troubles, but I think now, other things equal, that spermatozoa could crawl through the cervical canal equally as well before I cut it as afterwards, if the size of it was a factor in the case, nor can I understand even yet why a cicatricial pathway is more attractive to a spermatozoa than the soft mucous road provided by nature. I believe now that in this case, and twelve similar ones which have occurred in my practice, that the reconstruction of organic tissues resulting from these operations and in cases of sterility and dysmenorrhœa, were not owing to the cicatrix formed but were brought about through changes in the nutritive powers of the nervous system induced by the shock of surgery.

In the *Boston Medical and Surgical Journal* for November, occurs a report of the Neurological Society of New York, for Nov. 1, 1881. At this meeting Dr. Langdon Gray read a paper on the subject of the effect of genital irritation in the production of nervous disorders. He gave a *resumè* of the history of

th s subject, stating that the first paper attracting the attention of the public to the subject, was by Mr. Stanley in 1833, who found that in many cases of nervous disorder there were marked lesions of the genito-urinary apparatus, while none could be discerned in the spinal cord, and concluded therefore, that the trouble was reflex. This dictum was accepted by the profession until in 1856, when the now Sir William Gull declared that Stanley's cases were utterly worthless as proofs.

It may be observed here that Stanley's reports do not state that the verification afforded by cure of the lesions was given as were Dr. Sayres. S. W. Mitchell in 1861 coincided with Stanley's critics, and said the lesion of the spinal cord in his cases must have been microscopic, and further that the genito-urinary lesions might have been due to the diseases of the nervous system. Brown-Sequard, however, said Dr. Gray, had lately appeared as champion for Stanley, but the opinion of the profession had taken a turn against Stanley until the reports of Dr. Sayre on want of co-ordination and paresis had appeared, when another reaction of the professional mind had set in, and one physician had gone so far as to report the cure of cases of cerebral softening and insane paralysis by circumcision. Dr. Gray then went on to criticise Dr. Sayre's cases singly; in part of them denying that there was any lack of co-ordination, and in others, that there was actual organic disease as myelitis of the anterior horns, while others were cases of meningeal hæmorrhage with softening, and were not cases of reflex disorder as supposed by Dr. Sayre.

To account for the benefits of circumcision in these cases, a fact which cannot be disputed, Dr. Gray believed that the rest afforded to patients by the removal of a source of irritation from an exquisitely sensitive organ was really the source of benefit. Obviously this theory can prove nothing but the theory of reflex nervous disease. But Dr. Gray goes on to say that the tearing and cutting in these cases, when circumcision is performed, makes a decided impression upon the nervous sytem, acting in the same way in which a fit of intoxication has been known to do in breaking up an attack of *tic doloureaux*. Dr. Gray is very near the true theory of the therapeutics of these cases when he cites a case of epilepsy and kleptomania which was cured by removal of some old cicatricial tissue from the scalp. Certainly in this case the cure would not be accepted as a verification that the kleptomania

and epilepsy depended upon co-existent cicatricial tissue of the scalp.

Dr. Gray, while denying the theory of reflex paralysis in these cases, advocated the operation by circumcision when it existed, or whatever other operation might be required to remedy disease or deformity of the genital organs, which was co-existent with nervous disease.

Dr. Sayre replied to the paper of Dr. Gray, stating that he had thought before hearing the paper that he was the first in the profession to call attention to this matter. He read a number of extracts from letters of physicians written to him in which successful cases were reported in the treatment of nervous disease by circumcision. He declared that his observations were so large in cases of this kind that he was unprepared to believe that organic disease was present in at least but very few. He cited a case in which paralysis was caused by tying a string around the penis, and which disappeared when the string was removed. And a case sent to him by Dr. Knapp with atrophy of the optic nerve, who had phimosis and was perfectly cured by circumcision. Obviously atrophy of the optic nerve is not simply a result of a reflex irritation without organic change, nor do the two reports of Dr. Sayre pretend to limit the nervous disease, produced by reflex genital irritation to functional disorders.

Dr. Otis next states his belief that there was something more in the relations of genital irritation and nervous disease than coincidence, and that the same fact held good in relations between a removal of genital irritation, and the disappearance of the nervous disease. Dr. Otis cited a case of epilepsy cured by dilatation of the meatus urinarius, a case of melancholia in a gentleman which was benefited by a series of such dilatations and cured entirely by a cutting operation; a case of apparent hip joint disease with atrophy of the limb which was cured by circumcision and dilatation of a contracted meatus. Dr. Sturgis thought the verdict of not proven would apply to Dr. Gray's cases, as well as Dr. Sayre's, and that in Dr. Gray's paper, the point made was, that in such cases as reported by Dr. Sayre, the disease would return.

Dr. Seguin remarked that he had never seen a case of paralysis from genital irritation; yet did not deny the possibility, and stated that Dr. Jacobi had never met with such a case. Dr. Geo. M. Beard remarked that he had drawn two conclusions, viz.: that in

the vast majority of cases the presence of phimosis and contracted meatus, bore no relation to the general health, or nervous diseases; and that only in a few cases could the brilliant results achieved by Drs. Sayre and Otis be obtained and that these operations often did harm.

The most striking feature of this discussion is the entire disagreement of the participants. The question is raised relating to the difference and likeness of functional and organic disease. And this difference is asserted to be so great, of course in kind, that it is made the ground upon which the conclusions of one gentleman are refuted by another. It is remarkable that any two physicians engaged in the same line of practice and study should observe such different results in the same methods of treatment, and in studies of the etiology of disease. It is undoubtedly true that in a discussion of this sort, on a scientific question not yet proven to be true or untrue, that no positive agreements could be arrived at, and more especially when the personal equation is taken into account. It is safe to conclude, from indications based upon all such cases given in this discussion, that nervous disease may result in genital deformities, and that genital deformities may result in development of nervous diseases; that the cure of nervous diseases may cure the genital irritation, and removal of genital irritations may cure nervous diseases; that the physician who treats all nervous diseases, with co existent genital irritation, by the usual methods, may do good to both, and possibly harm to either, and the physician who treats genital irritation with co-existing nervous disease by surgery, may do good and possibly harm. It is to be expected that when a scientific question lacks the essential varification required to make it a science those observations from only one side of it, and of different sides by different observers, can only give corresponding results.

At present, there is probably no more evidence that a contraction of the meatus will cause epilepsy, than that the nervous disease, of which epilepsy is a symptom, can cause a contracted meatus. It may be as scientific to infer that a diseased trophic nerve, even embryonic, may cause a phimosis, as that a phimosis may cause atrophy of the optic nerve, and the same I think will hold good in that other remarkable case cited, and we may well question whether a contracted meatus caused apparent hip joint disease with atrophy of a limb, or whether a nervous disease

caused them both, or a real hip joint disease produced a contraction of the meatus, and an atrophied limb. From the fact that clinical reports and the discussion quoted do not establish scientifically the real relations of genital irritation and nervous diseases, and from the fact they also do not as a consequence, establish the philosophy of the therapeutical effect of surgical operations upon the genitals as related to nervous diseases, it becomes necessary to seek some other explanation than these disputed ones, and I think the likeness of this effect to other established therapeutical facts will warrant the conclusion that in such cases the benefit to the nervous disease is produced by nervous shock!

A nervous shock, to be therapeutical, must differ from nervous stimulation only in degree, and this treatment in these cases, bears a very close analogy to the established fact that stimulation of the nerves in organs which receive their termination, as the muscles for instance, by the electric current, exert a beneficial effect—a curative effect—upon diseased nerves, and their centres. In my opinion the cases cited, of cure of atrophy of the optic nerve by circumcision, and of melancholia by dilatation of the meatus, are instances in point, and to further illustrate this law deductively, I will cite:

CASE V.—Mrs. —— aged 74 years, when she was 71 years old, now four years ago, had an attack of right hemiplagia. From the history I concluded the cause was not hæmorrhage. Sensation and motion were entirely abolished in the arm, and the hand was contractured. There was some sensation in right side, and lower limb, and she had power to flex and extend the limb from the hip joint to a limited degree. The foot was inverted upon the ankle joint. She had never attempted to stand since her attack three years before. During past two years her mind had become impaired—the manifestation being amnesic aphasia. She first gradually lost the power of making herself understood, and then of understanding what was said to her as well. This was particularly noticeable from the fact that she was much given to reading, especially the newspapers, which practice she ceased from evident inability to gather ideas from language. She would pick up the paper and try to read, and in a short time shake her head sadly and give up the effort.

I treated this lady for sixteen months using no remedy but

electricity to the paralyzed muscles, and a club foot apparatus for her foot. After six months treatment she began to walk, the muscular power and sensibility of the right side, except the arm, continued to improve while she was under treatment until the action of the lower extremity was remarkably good: the arm remained the same. But the surprising results of this long continued stimulation of nerve ends and muscles was the almost entire cure of the aphasia. She began first to read the newspapers, and the first idea she got from this source known to her friends, was that Grant was in Egypt. From this time she gained confidence and began to talk again, and her aphasia was removed to a greater extent even than was the paralysis.

In the treatment of this case the partial relief of the paralysis, and the cure of whatever lesion caused the aphasia, there was no remedy used but the indirect current of electricity which was applied only to the affected muscles. The result proves the proposition, as well as anything in medical treatment can be proven, that nerve stimulation and shock are very valuable therapeutical factors in the treatment of nervous diseases.

It may in time be observed that the operations of iridectomy, or that for pterygium, will have as beneficial an effect upon atrophy of the optic nerve, when eye deformities and atrophy co-exist, as the operation of circumcision has been known to have, when phimosis was co-existent with such atrophy; and I believe that the theory of cure by nerve shock in these cases, acting independently of cause and sequence, will be established by verification to be the true therapeutical philosphy.

Article XL.

Case of Hemiplegia and Aphonia, Precipitated if not Caused by the Rarefied Air of Great Altitude. By C. H. Hughes, M. D., of St. Louis.

In Aug. 1880, Dr. —— was up in the mountains of Colorado, about 13,800 feet above the level of the sea, one morning, when he was suddenly stricken with right hemiplegia and and aphasia. He is now so recovered that he can write short and familiar prescriptions legibly, but can not write a letter without an amanuensis.

While ascending to Vita Pass between Alamosa and Pueblo, a great many of the passengers in the car had nasal and pulmonary hemorrhages, but he was exempt and "felt first rate," as he expresses it. The day he was stricken was a beautiful, clear, bright day.

He thinks he had contracted syphilis eighteen months previously from a patient, having got the virus in a recent eschar on his wrist, caused by a burn from a student's lamp. Patient was twenty-six at the time he was seized. I think the notion about syphilis is a delusion entertained by him only since the hemiplegia appeared, as he points to the site of a venus plexus on his arm as the place of the eschar, and it exhibits no evidence of having been a venereal sore or in fact, of any kind. He has had none of the ordinary evidences of syphilis, which however, is not uncommon when the nervous system is profoundly involved.

The treatment consisted essentially of half grain doses of proto-iodide of mercury at night, and iodide of potassium and the bromides, the latter in thirty grain doses, the former in one to two drachm doses three times a day. The patient began to improve after he had taken treatment one week, and has so continued until only some embarrassment of speech under circumstances of mental excitement, and mental inadequacy to prolonged mental effort, remain.

There were respiratory embarrassments in this case, in its early history and cardiac irregularity, the latter slightly persisting, but no organic lesion is there apparent. So far as we could discern, the hemiplegia was the result of apoplexia rather than syphilis, whether or not there was a syphilitic factor of which the evidences are slight. The fact that iodide of potassium was largely and beneficially employed, does not prove the case to have been of venereal origin, though in using it, a necessary indication was filled, while the patient received the benefit of the doubt as to the factors of causation. He did not do well, however, when the bromides were omitted.

Article XLI.

NOTES ON CASES IN GENITO-URINARY SURGERY.

—Case No. VI.—

Irritable Stricture of large Calibre at the Bulbo-Membranous Junction.—Chronic Prostato-Cystitis.—Old Gonorrhœa and Gleet.—Careful Dilatation.—Great Improvement Almost Amounting to a Cure. By W. Hutson Ford, M. D., of St. Louis.

February 4, 1880. Mr. G. H. C——, aet 50, a large, well developed man though somewhat haggard. Married, with one child; a gonorrhœa 30 years ago. followed by a gleet which was treated by deep urethral injections. Some years ago was obliged to ride long distances on horseback, and within three or four years has been affected with dull pain in the back, sensations of chilliness and frequency of urination. The stream has been getting steadily smaller. The prostate is normal. There is no residual urine. There is no stone. Suffers from a painful hæmorrhoid which is extruded at stool and sometimes bleeds. Has had no bleeding by the urethra, but there is pain during the last moments of the act and for some minutes afterwards. He is a bilious subject. The urine is high colored, very acid, deposits some mucus but no pus. B. B. 37 passes down to bulb. Urethra very irritable. B. B. 23 is strongly grasped in passing the bulbo-membranous junction. B. B. 22 passes with tolerable ease.

Advised intermittent dilatation, and if the stricture should prove irritable or resilient, urethrotomy. For the present, hot hip baths every night. Flannel around the loins.

Feb. 7. C. S. 26 would not pass bulb. The stricture is dense and unyielding. The sound was engaged in the stricture and left for three minutes.

Dilatation.

Feb. 10. C. S. 23 passed into but not quite through. Ordered capsules of copaiba and cubebs. Vichy water through the day. Hot hip baths at night.

Feb. 13. C. S. 28 and C. S. 27 passed. C. S. 29 engaged.

Feb. 15. C. S. 29 passed through. No pain in the back since

the last passage of the sound. Eyes yellow. Cholagogue pill and aperient next morning.

Feb. 17. c. s. 29 passes easily through. Pain in the back not felt since last introduction.

Feb. 20. c. s. 29 passes easily. c. s. 31 engaged.

Feb. 24. c. s. 31 passes. There has been some irritation about the urethra and rectum, which yielded to a mercurial and saline aperient.

Feb. 28. Has been feeling decidedly better. c. s. 31 passes. 33 engaged for three minutes.

March 3. c. s. 31 passed but somewhat tightly. The pain in the back has disappeared, leaving, however, some sense of weakness.

March 7. c. s. 32 passed easily.

March 11. c. s. 33 passed with freedom.

March 16. c. s. 34 engaged. c. s. 33 passed easily.

March 21. c. s. 34 passes with difficulty. Some pain in the back no doubt due to the use of the 34 sound.

March. 26, c. s. 34 passes without much resistance. Pain in the back continues: Cholagogue pill. The pain in the back is relieved temporarily by the passage of the sound.

March 31. c. s. 34 passed still more easily. Has been using massage but without any benefit, for the rachialgia. Passes water but thrice during the day, and can go all night without micturition if he so wishes. Looks and feels better. Massage without benefit.

April 5. c. s. 34 passes still more easily. Scarcely any pain except a dull sensation which he refers to the prostate. Has not got up to pass water for the four past nights. Looks better.

April 11. B. B. 33 shows constriction at the bulb, but c. s. 34 passes without obstruction. The stricture is somewhat resilient. The urine is slightly acid, of good color, but shows shreds of mucus.

April 14. B. B. 33 also defines stricture one inch down, also another band just in front of the scrotum (peno-scrotal angle) c. s. 34 passes with difficulty: There is a good deal of irritation about the urethra and rectum.

April 17. He has had an attack of congestion of the rectum, urethra and neck of the bladder founded in biliousness. This was successfully met with leeches to the perineum, suppository of opium and belladonna, abstinence and quinine.

May 12. Has been doing well enough. The pain and chilliness in the back are nearly gone. He does not pass water at night, does so but three times during the day.

July 1. After this the symptoms steadily improved. He passes a 34 conical sound about once in ten days or two weeks.

Improvement.

Sept. 5. Has been doing only tolerably well of late. The urine shows some cloudiness. Advised him to get rid of his hæmorrhoid, and to open the bowels freely with mercurial pills containing podophyllin, and a saline draught next morning. Also advised him to pass the sound twice a week.

Prostatic Irritability More Frequent Use of the Sound.

Sept. 11. Doing very well but is obliged to pass water, every night. Advised some anti-bilious medicine, and the passage of the sound every alternate night for the next week.

Sept. 29. From the date of last note (Sept. 11,) the patient passed a No. 33 short curve c. s. every other night for a week then a long curve 33 c. s. for a week, and finally since the 23rd. he has passed a short curved c. s. 34 every night. His symptoms are very greatly alleviated; no irritation whatsoever has been induced. He is now to use a short curve blunt No. 35, which he is to pass every night for a week or two.

July 1, 1881. The patient calls for the first time in several months to say that he has had some irritability of the bladder of late. Has been passing the sound at intervals of a week or ten days. Finding him bilious, advised some appropriate medicine, and the discontinuance of the use of the sound until he felt better. He has been seen frequently since and makes no complaint with regard to his urinary organs. He never has to rise to make water at night, though if awake, he does so as a matter of comfort. His urine which he watches closely is seldom unduly acid and is habitually quite clear. He fully understands the use of diluents with alkali, and the value of frequent introduction of a large sound with caution in overcoming urethral irritability. Though not as well as he might have been after a section of the deep stricture at the bulb, and although a necessity for these measures might occur in the future, he is nevertheless so much better as not to be incapacitated from any usual degree of mental or bodily exertion. Indeed, his genito-urinary apparatus is perfectly quiescent most of the time, only giving him inconvenience when he gets bilious. At such times an internal hæmorrhoid also protrudes, becomes painful and bleeds. This he insists on managing his own way, although from the first I have constantly directed his attention to the importance of the removal of this complication from the elements of his case.

Original Lecture.

Article XLII.

Lectures on Fractures and Dislocations. By Jno. T. Hodgen, M. D., Professor of Special Fractures and Dislocations and Surgical Anatomy, in the St. Louis Medical College.

II.

Intra-Uterine Fractures.—The Diagnosis of Fractures.—Mode of Examination.

INTRA-UTERINE FRACTURE.

The bones of a child may be broken while in the uterus. External violence applied to the abdomen of the mother, or the force employed in delivery are the only agencies that fracture the healthy bones of the child before delivery. During the delivery of the shoulders the accoucheur sometimes fractures the humerus or the clavicle. In turning, and during delivery in a breech presentation, the femur is sometimes broken. I know a case in which in the act of turning a recently dead child the foot, the lower epiphysis of the tibia, and the entire fibula were pulled away. I believe it possible to seriously injure the spine in turning when the waters have been long evacuated and the uterus snugly embraces the child.

Uterine contraction and the action of the muscles of the child, may break the fragile bones of unhealthy development. I have a skeleton in which sixty-five fractures are shown, most of them united with such deformity as to lead to the conviction that the fractures were due to muscular action during intra-uterine life.

I recently saw a healthy child, two weeks old, in which there was a fracture of the left clavicle near its acromial end. A thick callus enveloped the fractured extremities; the bone was in good position.

The physician who attended the case, a careful, competent

accoucheur, knew nothing of the injury until the nurse called his attention to it several days after the child was born. As the child was the first and unusually large, the fracture probably occurred during the passage of the shoulders. No force was used in its delivery after the head was delivered by the forceps.

THE DIAGNOSIS OF FRACTURES.

It is well to learn how the injury occurred. Hear what the patient has to say of the manner of the injury; learn the site and character of the pain. Examine the pulse, attend to the character of the breathing, observe the expression of the face, note whether there be much pallor; note also, the position of the limbs and the general attitude of the patient, consider the age of the patient, for all these may be valuable not only in determining the gravity of the injury, but from some of the observations thus made a hint as to the site and character of the injury may be gained, so that we may proceed more directly to the part injured. If a limb be injured, strip both limbs and compare one with the other. If they are dissimilar, learn whether a difference existed before the injury.

Local swellings, after injury, may or may not be associated with fracture, yet these should command the attention of the surgeon. Abrasions associated with swellings and discoloration at site of fracture indicate direct violence; swelling and discoloration at remote sites, indirect violence. Discoloration often makes its appearance at sites remote from fractures. The site of discoloration is determined by the character of the connective tissue at the site of fracture and its connection with distant points near the surface. Thus a fracture of the neck of the humerus often presents an ecchymosis at the insertion of the deltoid or near the elbow along the border of the triceps and biceps muscles. A fracture of the body of the scapula has often associated with it discoloration near the crest of the ilium and along the anterior border of the latissimus dorsi.

In fracture of the long bones, the fragments may overlap, and projecting under the skin may be seen or felt. In fracture of the patella, olecranon, acromion, coracoid and os calcis, the fragments may be drawn apart, thus leaving a depression that may be seen or felt.

In fracture the fragments may be displaced laterally, and form at the point of fracture an angle, or there may be

a rotary displacement. In fracture of the clavicle, the deformity may depend upon displacement in all three of these directions. So, also, in certain fractures of the radius. In lateral displacement the condition may be detected by the projections of the two fragments in opposite directions; in angular displacement, the two fragments project on the same side of the limb.

In every case of fracture of the bones of the extremities there is entire or partial l ss of power and yet the diminution of power may not be so great but that the part may be made to perform its ordinary offices. In impacted fracture of the neck of the thigh bone the patient is sometimes enabled to walk for a time, without great suffering. So, also, in impacted Colles' fracture, the hands and wrists are sometimes used continuously. The fibula may be broken toward its middle without seriously inconveniencing ordinary locomotion. Patients having fracture of the tibia alone, sometimes walk considerable distances.

Some months ago I saw, with a friend, a case of fractured tibia. The patient had attended to his usual duties for several days, and yet a careful examination detected a transverse fracture of the tibia near its middle. Ten years ago I treated an injury of the arm eight or ten days, without suspecting fracture. A professional friend detected a transverse fracture near the middle of the humerus and called my attention to it. The patient had been walking about the streets all the time he was under my care. It is a common notion with the laity that if a limb is broken, a toe or finger cannot be moved; this is an error. Yet the almost complete retention of power cannot be regarded as a certain indication of absence of fracture.

CREPITUS AS A SIGN OF FRACTURE.

The grating of one fragment against the other, with motion at an unnatural site, is the most positive sign of fracture. Yet one may mistake other sensations for that produced by the rubbing of one fragment of a broken bone against another. Thus in injuries about joints where it is not possible to determine the precise site of motion; and when, from inflammatory changes in the synovial membranes or the cartilages, a certain roughness is felt or heard from the rubbing of their altered surfaces together, it is quite possible that one should mistake such roughness for the crepitus of fracture. In certain inflammations of the sheaths

of tendons, a creaking sensation and sound may be distinguished and mistaken for crepitus. True, bony crepitus, however, when produced by bones recently fractured is so harsh and grating that a little experience will enable us to distinguish it from the softer rubbing of an inflamed or altered structure of a joint or the musical creaking of an inflamed tendon.

Mobility at unusual sites is a most positive sign of fracture and when removed from the neighborhood of joints cannot fail to convince us of the presence of fracture.

Emphysema found about the chest after injuries of the ribs or sternum may imply fracture. So, also, an emphysematous condition of the scalp after blows over the frontal sinuses, or in the mastoid region may indicate fracture. Gangrenous emphysema may lead the unwary to suspect fracture when none exists.

Unless a point of motion can be definitely determined, one may be easily misled as to the site of a fracture indicated by crepitus whether it be recognised by the ear or the hand, for the bones are good conductors, and the sensation may be referred to any point of a broken bone, however remote from the actual site of fracture. The earliest possible moment after the injury is the best for examination for fractures or dislocations. The outline of the part is then less disturbed by extravasation of blood or the exudation of inflammatory products. The patient is then to a greater or less degree under shock and the sensibilities are somewhat obtunded. Increased sensibility has not yet been aroused by the injured parts having become inflamed, and the patient thus suffers less and submits more quietly to manipulation. After some hours or days, not only is the general irritability greater, but the parts are more sensitive.

Immediately after an accident, the friends are more anxious to have the doctor's services and are less disposed to interfere with whatever he thinks required than later, when they have had time to learn that every neighbor has a doctor who is especially qualified for the management of just such cases.

MODE OF EXAMINATION.

The desire is to learn all that we may require to treat the case successfully with the least possible suffering to the patient. The eye gives no pain; the surgeon should look at the patient, and at the injured parts. If this be sufficient to satisfy him of the character and the extent of the injury, he may go no farther

in his examination, but at once prepare his dressings, and complete his examination while in the act of adjusting the displaced parts. If, however, he is not satisfied as to the character and the extent of the injury, the hand may be passed gently along the limb, and if the broken bone be superficial, as the tibia, clavicle, ulna, or lower part of the radius, a projecting point may determine the site and character of injury. If farther manipulation be required, the surgeon should learn whether the parts are unusually mobile, and let the effort to detect crepitation by rubbing the broken fragments together be the last, for this is painful and often not required. If, however, it is necessary to secure crepitation, let him then learn all that he may desire to know in regard to the fracture, and at the same time replace the broken fragments to avoid farther pain by future manipulation while dressing.

In oblique fracture of a part of a limb in which there is but one bone, as the thigh and arm, it will be found that the direction of the fracture and the length of its line will determine the ease with which motion may be made in one direction or another. Thus, if the line of fracture be obliquely upward and backward, or downward and backward that motion will be most resisted in a corresponding direction and more easily effected in the opposite. In case of transverse fracture in the leg and forearm, motion will be more resisted in the line of the plane of the two bones, and more free in a direction backward and forward. In case of fracture of one of two parallel bones, as of the tibia or fibula or of the radius or ulna, motion will also be more free backward and forward. A valuable method of manipulation to determine the presence of fracture of the fibula or radius above the lower third will be found in the elasticityof the unbroke bones when pressed together near the middle of that part of the limb. If there be fracture, the broken bone will recede under pressure, but will not spring back to its position when the pressure is removed, with the same elasticity that it would if not broken.

TIME FOR ADJUSTING DISPLACED FRAGMENTS AND APPLICATION OF THE DRESSINGS.

There can be no question that every displaced fragment in fractures should be adjusted at the earliest possible moment. We thus get rid of the goading and irritation of the soft parts,

put an end to direct pressure on and irritation of nerves, and favor a more free flow of blood to the distal part of the limb by relieving the arteries of partial or complete obliteration that may be due to presence of displaced bones or to the abrupt bending and kinking of the arteries. The same is also true in regard to venous return. Thus it appears that there will be less danger of gangrene of the limb if the fragments are early replaced. 1st., because of an earlier restoration to the normal blood flow, and 2nd, by diminishing the probabilities of inflammation which, if prompted by goading of lacerated tissues by the projecting fragments of the bone, may result in gangrene.

Translations.

Article XLIII.

FROM THE FRENCH.

Excerpts from Late French Journals. [Translated for the Journal.] By A. H. Ohmann-Dumesnil, A. M., M. D., of St. Louis.

A New Skin Disease.—M. Mégnin has presented to the Société de Biologie, portions of the skin of a rooster affected with a skin disease hitherto undescribed. It is caused by a fungus allied to *Achorion Schœleinii* and *Oidium* albicans, consisting of a fine, short, tortuous mycelium, giving out sporophores, short, reticulated and terminated by strings of five or six round spores. These spores are the longest of the fungous parasites being larger than the *Achorion*, *Trichophyton*, and *Oidium* by one-third. This fungus abounds and is only found between and on the scales of the cutaneous epithelium—which presents the appearance of being covered with a very white powder—and does not penetrate the follicles of the feathers. The author proposes the name *Epidermophyton Gallinæ*. The affection extended all over the skin, but in the living animal, could only be noticed on the crest and naked parts of the cheeks. Repeated washing had no effect on this. Experiment showed that it is highly contagious for fowls of the same species.—[*Gazette des Hôpitaux*.

Extirpation of Uterine Fibroids.—M. Dezannean arrives at the following conclusions:

1. Enucleation is the only treatment applicable to uterine fibroids projecting into the vagina.

2. Enucleation is indicated in all cases in which hæmorrhage or troubles due to compression place the patient's life in danger.

3. In proportion as the tendency is to progress towards the vagina, just so much ought operative measures be deferred.

4. For enucleation the finger is preferable, when it can be employed, to the metallic nail, curettes, etc.

5. The finger nail ought to directed towards the tumor in order to spare uterine tissue.

6. When the finger no longer suffices, torsion and traction are the best means to employ.

7. The fibroma ought to be securely grasped with the appropriate instruments; the chain of an écraseur pretty tightly applied is very useful.

8. Enucleation may be the cause of serious accidents and, on that account ought to be performed very carefully and be followed by the employment of antiseptic agents.—[*La France Médicale.*

STUDIES ON HYPNOTISM.—M. Dumantpallier has observed in his service a patient who at the termination of an attack of hystero-epilepsy, caused by fright, became a lypemaniac. She remained several days in this state, and it was only necessary to plunge her in the hypnotic sleep by fixing the eyes, and to awake her an hour later, by the same method, to have all trace of melancholy immediately disappear. Some time after her lypemania reappeared; the induced sleep and awakening succeeded, as in the former attempt in procuring a cure which, up to this time, has been constant.

Certain hysterical persons possess, during the hypnotic sleep, an incredible muscular sensibility. One extremity of a rubber tube 5 to 6 metres long and 1 centimetre in diameter is applied to a muscle of the leg, the other extremity is placed in relation to a watch and each tick of the second hand provokes a small contraction of the muscle. The experiment can be repeated indefinitely with the same results. The telephone produces similar results, and if a microphone be interposed, a look or artificial light brought to bear upon it, immediately influences the muscles and originates contraction.—[*Progrès Médicale.*

DETERMINATION OF ALCHOHOL IN THE BLOOD.—M. Gréhaut injected alcohol in several dogs, at intervals of a half-hour so as to produce intoxication and death. He was enabled to ascertain that at the time the animal succumbed, the blood contained one per cent. of absolute alchohol, that is to say, a quantity about double that required to produce complete intoxication. It is interesting to compare this result with that which has enabled M. P. Bert

to establish the manageable zone of anæsthetics, ranging from single to double in the quantity contained in the blood, at the moment insensibility shows itself and death. That is to say, the quantity necessary to produce death is about double that which will produce full anæsthesia.—[*Ibid.*

DREAMS.—M. Delaunay has made on himself an interesting study of the relations existing between dreams and the region of the brain more particularly irrigated during the night. According as the subject sleeps on his back, or as the head reposes on the right or on the left side, will the dream take on certain characteristics, almost always similar in regard to their nature. Thus, the head reposing on the right side, will give rise to unconnected dreams, full of nightmares; on the other hand, if it is the left side that is on the pillow, the dreams will be intelligent, and it is in this position that certain persons speak in their sleep. —[*Ibid.*

VISCERAL TRANSPOSITIONS.—M. L. Vallienne has written a study on the above subject and the following are his conclusions:

1. Splanchnic inversion *in toto*, is a symmetrical state the opposite of the more ordinary one.

2. It is relatively pretty frequent.

3. It is entirely indifferent and a matter of indifferance to the individual, the subject of it.

4. It can neither be considered a monstrosity nor an anomaly.

5. On the contrary, it must be regarded as a modification of the normal state which is merely less frequent.

6. Partial splanchnic inversion is extremely rare.

7. It must always be considered an anomaly and often a monstrosity.

8. When accompanied by malformations, ectopia may be called in as one of its possible causes.

9. In other cases the cause is as yet unknown.

10. The primary cause of visceral transposition is unknown.

11. The first of the secondary causes must be looked for in

the position of the embryo to the right of the vitellus.—[*Lyon Médical.*

TREATMENT OF RABIES WITH HOANG-NANG.—Hoang-nang is a creeper found in the mountains separating the kingdom of Annam from Laos. This plant belongs to the family of Longaniaceæ. So says Dr. Lesserteur. It produces the same physiological effects as strychnia and brucia. However, under its influence, it is always the lower limbs which first are affected with tetanus, and in which the greatest amount of contraction is observed after death.

The Tonqua remedy is prepared after the following formula: Alum, 1 part; Native Realgar, 2 parts; Bark of Hoang-Nang, 2 parts; the whole is powdered and made into pills containing each 25 centigrammes of the mixture.

Hoang-nan alone and the above mixture have been used as remedies for the leprosy, rabies, bad ulcers, scrofulidæ, paralysis, etc. It is reported to have marvelous effects in leprosy, yet experimenters have not met with any success. It has the reputation of being infallible for rabies, even when in its worst period, but such affirmations have no scientific value.

The Tonqua remedy was known at the beginning of the last century; it was then composed of cinnabar and musk. It seems to have rendered good service in the hands of the physicians of the time, in the treatment of rabies.—[*Paris Médical.*

EXAMINATION OF MEAT.—The following are questions which have been referred to a committee for consideration:

1. Can meat obtained from sick animals be given to the public for food?

2. Is it possible after slaughtering and when the animals have been quartered, or divided into smaller pieces, to distinguish between flesh from sick and flesh from sound animals?

3. Must the means adopted for investigating such meat in case it is decided in the affirmative be of a scientific or essentially practical kind? It other words, is it necessary to place the surveillance of the sale of meats in the hands of veterinary surgeons or of ordinary butchers?—[*Bulletin de l'Acad. Royale de Méd. de Belgique.*

Article XLIV.

FROM THE PORTUGUESE.

Study of the Etiology and Nature of Beriberi. By Dr. A. Pacifico Pereira. Translated from the *Gazeta Medica da Bahia*, for the Journal. By Joseph Workman, M. D., Toronto, Canada.

Experimentation is the the most reliable test of clinical observation, and it never can be dispensed with, as a valuable means of study, when we undertake the investigation of a question so difficult and obscure as that of the nature of a morbid process..

Clinical observation aids us in the study of pathological phenomema and the circumstances that accompany these highly important elements in the recognition of the etiology and nature of disease, yet it is experimentation that gives us scientific certainty, when, in analogous conditions artificially produced, the phenomena are provoked, and we can thus establish a co-relation between cause and effect, by reproducing at pleasure an observed fact, and studying it closely in its most minute particulars.

In the elucidations of the pathogenesis of beriberi we take, as our principal point of departure, the study of the climatological conditions in which the disease is developed, and in these we constantly find, as capital phenomena,—high temperature, and excessive humidity of the atmosphere.

The first idea that scientific logic naturally suggested to us, was that of experimenting on animals kept in conditions of temperature and humidity similar, in order to see whether they presented lesions similar to those which are observed in beriberi.

In searching closely the annals of science, we have met with many recorded experiments of this nature, made by distinguished physiologists and pathologists; experiments which have, besides the stamp of competency, the very great value for our case, of not having been conducted under any preconceived idea.

These experiments prove that animals kept in an atmosphere of high temperature and excessive humidity, die, presenting notable alteration of the red globules of the blood, and fatty degeneration in various parenchymes and tissues; and pathological anatomy shows that these alterations are the same as those frequently met with among the cadaveric lesions of beriberics.

The importance of the experiments to which we refer, and their value in the question of which we now treat, oblige us to relate them minutely, and at the same time to adduce the corroborative argument with which physiology, hygiene and clinical pathology, coupled with experimental pathology, furnish us.

We shall begin with the experiments of Dr. M. Litten, docent in the University of Berlin, *on the action of high temperature on the organization.*

Litten made interesting and repeated experiments showing the action of a high temperature on the organism, and he published the result of his investigations in the *Archiv. f. pathologishe Anatomie und Physiologie* von R. Virchow, (vol. 70, page 10).

The experiments were made chiefly on Guinea pigs, by keeping them enclosed in a metalic casket, with double walls, between which water circulated, which was kept heated by a flame of gas or alcohol, and governed by a Bunsen regulator and a thermometer, thus presenting a constant determined degree of the temperature of the air contained in the casket, which was constantly renewed by a special ventilating contrivance.

The animals were kept under the influence of a temperature, constantly of 36° C. (or 96°.8 Fahr.) with the air saturated with the vapor from the waters, or in that of 37° C. (98°.6 Fahr.) with the air dry. For a few days they resisted the action of this high temperature. The alterations constantly met with in the autopsies were fatty degeneration clearly characterized, in the liver, the heart, the kidneys and finally in the striated muscles, the respiratory, and of these the intercostals and the diaphragm were the most affected.

The degeneration was more or less intense according to the duration of the experiment, never however failing to exist in the animals which had been kept at the least thirty-six to forty-eight hours in the casket, subject to that high temperature, and being found in excess in those which had been five or six days in it—which was the longest period that the animals resisted the experiment.

The records of the autopsies carefully made by Litten, immediately after the death of the animals, describe the very advanced stage of the fatty degeneration found in the liver, the heart, the kidneys and the muscles.

The cells of the liver, in the whole of the acini were full of large drops of fat, and less often of small drops, in which nucle could be distinguished. In the kidneys the uriniferous canaliculi were seen altered in a very high degree, and small drops of fat so filled them that the epithelium could not be distinguished, and where the epithelium was visible, the cells presented large and small drops of fat, which covered the nuclei. The glomerules were generally well preserved frequently presenting among the tubules, a slight fine deposit of fat.

The musculature presented profound alteration. In the ventricles and the papillary muscles of the heart, the degeneration was very intense; the sarcolemma was full of small and large drops of fat, so that the contractile substance could not be recognized. The intercostal muscles and the diaphragm presented the same alterations, and the muscles of the skeleton in a less manifest degree. The fat invaded in every part of the tissue of the muscles, and at some points, the fatty drops were so densely crowded that the transverse striæ disappeared. The vessels presented fatty degeneration in some parts, but most notably in the choroid plexus and the pia mater, and less, though still clearly pronounced in the small branches of the coronary arteries. The small drops of fat had their special seat in the adventitia; they were less notable in the musculature, and were only partially seen in the nuclei. In the brain and the medulla there was nothing abnormal. The digestive aparatus presented alterations of but little importance; the only notable alteration was fatty degeneration of the utricular glands of the stomach.

The blood taken from a moribund animal, and examined immediately, without any reagent presented a great number of crystals characteristic of the blood of the Guinea pig, (tetrahedral) and small, irregular disclosed masses, full of nuclei and drops of fat.

New and varied experiments by different physiologists and pathologists have shown that the fatty degeneration which is thus produced in different textures of the organism, by the action of a high temperature, was due to diminution of the process of oxydation.

The experiments of Sanders Ezu, in the laboratory of Prof. Ludwig, made on rabbits, show that the quantity of carbonic acid expired each minute by these animals, varied in an inverse proportion to the degree of the temperature of the air in which they were placed. The quantity was less in a temperature of 38° C. (100°.2 Fahr.), and greater in 8° lower.

The processes of oxydation, whose activity could be measured by the quantity of carbonic acid expired, constitute, in warm-blooded animals, the regulator destined to preserve the internal temperature of the organism unchanged, despite the great variations of the external temperature in which they live.

Leibermeister, in his important works on the pathology and therapeutics of fever, shows that in animals of a constant temperature, the processes of oxydation are the more active, the lower the degree of temperature is around them, and *vice versa*.

Litten, when examining animals after having kept them at the least, six to eight hours in a high temperature, found, as the consequence, a constant diminution of the carbonic acid expired. According to this illustrious experimentalist, the diminution of carbonic acid is due to diminution in the receipt of oxygen, and consequently a diminution in the oxydations. The expiration of carbonic acid, in these experiments, were so enormously diminished, he says, he could not avoid accepting as explanatory of the fact—a profound alteration in the organic elements which serve to carry the oxygen.

[TO BE CONTINUED.]

Proceedings of Medical Societies.

Article XLV.

ST. LOUIS MEDICAL SOCIETY.

Taken by the Journal's Stenographic Reporter.

Saturday Jan. 14th. 1882.

Remarks of the Retiring President, Dr. H. H. Mudd.

In resigning the chair to my successor I desire to express my thanks to the members of the Society for the uniform courtesy extended to me while acting as your presiding officer. I appreciate the honors and have enjoyed the duties connected with the position.

Some faces, mostly of men past middle life, have appeared with singular regularity before me at each meeting; I have learned to look with interest for them and to enjoy their presence.

The character that has borne the triumphs and the disappointments, the honors and the vituperations, to which we are all alike subjected, in the practice of our profession, and that still retains that profound love for our profession and respect for his compeers that is necessary to induce a regular attendance at our meetings is deserving of more than passing notice and has my earnest sympathy and regard.

We have had some valuable papers and profitable discussions, but the year should have brought work of more profit to the Society and I should have enjoyed the honorable duties, from which I am now relieved, much more if we had been able to discuss a larger number of carefully prepared articles.

Permit me, to say to the younger members, many of them my personal friends, who are striving honorably and earnestly for place and position in the profession, that they owe no duty to their patient or to themselves more important than those they owe to each other and to their local Society, and through that Society to the profession at large. It is a selfishness unbe-

coming to professional men that prompts neglect and forgetfulness of the duties we owe to our Society. There is no way to eminence in the ranks of our profession except through interchange of thought and experience. Each man, no matter how poor or mean his ability may be, is first in his patron's heart; but it is to the estimate the profession places upon our character and ability to which we are sensitive, and this estimate very uniformly fixes our position in the scale of professional eminence. We are judged by our peers and by our work among them.

Address by the In-coming President, Dr. Wm. Dickinson.

Gentlemen of the St. Louis Medical Society:

It had been a hope, sincerely cherished, that another, on this occasion, would have occupied this chair. To the indulgence of this hope, I was moved by the conviction, that a member, a friend for a long period, my senior perhaps in years, (though both still young) certainly my senior in membership with this Society, who, by constant presence and instructive voice has contributed much to the interest and profit of its sessions, possessed stronger and more convincing claims for this distinction.

But your kind partiality and voluntary suffrages have conferred the honor of this station upon your speaker, for which I return you my sincere and grateful acknowledgements. To receive this at the hands of my compeer's is truly gratifying. This award I may be permitted to interpret as an assurance, a testimonial of your personal friendship and kindly regards.

These I esteem as the highest and grandest of social attainments. These, Cicero, in his unequalled "Treatise on Friendship", declared to be "the most valuable of human possessions"; and, in illustration of "Love", that kindred but more exalted sentiment, the sublimest and most powerful of the human passions, he bursts forth in the impassioned apostrophe, "Good Gods! is there a man on the face of the earth, who would deliberately accept of all the wealth and all the affluence this world can bestow, if offered to him on the severe terms of his being unconnected with a single mortal whom he could love or by whom he should be beloved."

Besides the transient honor attaching to this place, it confers the privilege of enrolment of name among those many worthy names who have dignified this chair in this presence, and adorned the walks of social, professional and scientific life. Of

these, sixteen have paid the last debt of nature. Why should I recount the names of Farrar, Lane, Beaumont, Barnes, Reyburn, Linton, Pallen, Watters and others, distinguished in our profession in life, and in their death honored by this community; for their names and their fame, still live in the lively memories of most of the members of this society. To one of these was granted the singular and anomalous opportunity, which fortunately for science he had the sagacity and ability to improve, of making those original investigations by which an impulse and verification was given to physiological research, such as it has never received by any other man in any age or country. Dr. Wm. Beaumont has thus erected for himself "a monument more enduring than brass." Linton gave the world evidence of great natural ability and a profound knowledge of pathology; and Watters, by his acute perception, penetrating mental acumen and logical reasoning, was enabled to formulate and proclaim the accepted theory of the correlation of the vital forces. Though the credit of priority of discovery of the theory and its promulgation is contested, he persisted in its development, till his premature death arrested progress and transferred its completion to other hands.

Of those who have occupied this chair, nineteen still survive all of whom, save one, (Dr. David Prince now of Jacksonville Ill.) continue residents of this city. Dr. Meredith Martin President for the first time in the year 1840, again in 1842, 1845 and 1865, the Nestor of our profession, is still with us, and on occasions *too rare*, honors the society with his presence. Were all these combined in one assembly, what an angust conclave would be presented, scarcely less reverend than the old Roman Senate. Though the last and humblest of your number I salute ye all; and, as Horace, the great Roman Poet, esteeming a long life the superlative of human enjoyments, in grateful commemoration of his great patron, Mæcenas, embody his sentiments of profoundest respect, honor and affection in the most significant expression of which he was capable "serus in cælum redeas", so I, in humble imitation, invoke for ye all, useful and happy lives, and beloved by all, crowned with merited honors, in the self same words I incorporate my fervent benediction, may you *too* return late to heaven.

This society now enters upon the forty-sixth year of its existence; a period longer, probably, than that of any similar society

west of the Alleghanies. It has a membership of about one-hundred and seventy-five, embracing most of the eminent talent of the city. Yet some of the great lights, whom all delight to honor, are not with us. How gladly we should welcome their presence in this hall, and listen to the narration of their investigations and large experience. The peculiar character of our profession invites, yea more, *urges* to the impartation of knowledge. It permits no exclusiveness, no self or sole appropriation. In obedience to its behests, unwritten and unspoken, we convene, bringing each, his contribution of observation, experience or research that during the previous week may have been acquired or suggested. What crucibles are to the chemist medical societies are to the Science of Medicine. They are the common receptacles of ideas, principles and theories, by the fusion of which the worthless is eliminated, the genuine and practical educed and elaborated. Viewed in this light the mission of this society is an agency of immense power for the information and edification of those who enjoy its privileges. Its influence is wide-spread; it not only pervades this city but extends throughout the Mississippi Valley. See, therefore, to it that the declarations here made shall be sound, and orthodox, and in harmony with the most advanced views of the day. According to the results of this ordeal, new principles or novel theories will be accepted as true and incorporated in standard literature or denounced and rejected as medical heresies, and worthless. The voice, in dissertation or debate, may reach but a few; but the air thus set in motion has not ceased its pulsations, ere the spoken word is caught, and to it the dextrous hand gives durable impression, and anon the printed page sends it broad-cast for the perusal of thousands. Credible information comes to the effect that to the discussions of questions proposed or suggested by papers read, the ST. LOUIS MEDICAL AND SURGICAL JOURNAL which gives them full publication, is indebted for its enlarged circulation, quite as much as to the original matter contributed or that selected.

The great West, therefore, looks to the medical societies of this city as the oracles and umpires of controverted subjects and the exponents of the most approved medical thought and practice. We may well be proud of this society which soon will be able to celebrate its golden anniversary, a period embracing two generations of professional life. Does any inquire of its visi-

ble achievements. One, not the least deserves especial and emphatic mention, the intrinsic value of which has been greatly underestimated, perhaps, because it is a work of "home production." I allude to the preparation, by a resolution of this society, of an able and exhaustive monograph on "Yellow Fever; its Etiology Treatment etc.;" that scourge, which by its relentless fatality in desolating homes ravaging cities in the South appalled the world. This work of immense labor was composed by a member of this society eminently qualified by natural endowment and personal observation of this disease to give it fitting elucidation; and in the annals of this society it will ever stand a monument of its scientific zeal, and its exalted apprehension of the functions belonging to medical organizations.

In this presence and on this occasion I beg to indulge in a brief episode in commemoration of the memory of the men, the school and the city.

He, who at some future time shall appear as the historian of St. Louis, will fail in the discharge of his duty, should he omit to devote one brief chapter at least to the history of the "Missouri Medical College" and the narrative of a memorable incident in connection therewith. About thirty years since, a young woman of education, refinement, brilliant talents and indubitable energy, fired with ambition to adopt an artist's life, applied to the medical schools at the east for admission, that she might pursue the study of anatomy. Her application was refused and for no other reason than because she was a woman. Though herself refused she was not thus to be thwarted in her purpose. A stranger she came to this city, and to the Dean of its only medical college, she preferred her request as before. Upon what theory of probabilities she predicated a more favorable consideration of her application here in Missouri than in the state of her nativity, we are not informed; but in the heart of him who has popularly received epithets grotesquely descriptive, suggestive more of harshness than of delicacy, she found a large spot sympathetic and responsive to her high aspirations. By him she was cheerfully granted every facility desired. Miss Harriet Hosmer thus became the protegée, esteemed pupil and friend of the most eminent surgeon of this city and throughout the Mississippi Valley, Dr. J. N. Mc Dowell. To this *man*, therefore, to this medical school and to this city, shall forever attach the eternal honor of having first, in modern times, demolished the

barrier that prevented woman, within its precincts, from pursuing wholly or in part the required curriculum of medical study.

Though the little studio of Miss Hosmer, in her father's yard in Watertown Massachusetts, had witnessed the throes of her embryonic genuis in its struggle for birth, yet here in St. Louis was the real initial history of her art life. Then a novice and unknown, to what magnificent proportions has she grown! Now two continents are vocal with her fame, where, also, in many a *salon* of wealth and cultivated taste are found finished and admired works of her artistic hand. Several of her works now adorn the Mercantile Library in this city and others are to be seen in the "Crow Museum of Art."

With the name of Dr. Mc Dowell, in connection with that of the young anatomist, should also be associated in perpetual remembrance the name of another powerful friend and patron: the patron too of art in general, and of all that refines and enobles his fellows; whose great liberality for many years has largely contributed to the present measure of success and prosperity attained by Washington University, but whose munificence has recently obtained its highest and coronal demonstration in the erection and gift to it of the "Crow Museum of Art." I, of course, allude to the Hon. Wayman Crow.

In the grand vestibule of this classic structure, upon a graceful pedestal, rests a bust of this gentleman, a monument of the genius of Miss Hosmer; in which with singular fidelity to life, she has delineated the features and genial expression, characteristic of this noble man: and there it stands (with but little stretch of the imagination) extending to the visitor on his entrance a cordial welcome. But long before Miss Hosmer, the rising artist, had reached the summit of her fame, the great reaper death had gathered her teacher and beloved friend, Dr. Mc Dowell, to his fathers.

Seven years pass by, and a son, a resident of this city and member of this society, known by most of us, repected and honored, fell, wrestling manfully in the struggle of life. And now, not a brief week has elapsed, since the body of another son, the last of the children, the last of the family, by friendly hands, not of kindred by blood, was deposited in *its* last resting place.

But we must return from this depression, and address ourselves to the themes of the hour. Consider I pray you the city

and time in which you live, your attitude to duty in its special relation to this society; that of this society to this city, the metropolis of the West, in medicine as well as in respect to commerce. To the history of this society all can point with pride. Looking down the vista of the past we see it illustrated by luminaries, whose effulgence would be conspicuous in any city or in any time, especially by those who attained and maintained the first rank in surgery, Mc Dowell, Pope (the mere mention of whose name awakens the mental award of respect and honor, associated with regret at his untimely death) and their eminent successors confessedly their peers, dominant in our time, of whom, one has but recently retired from the presidential honors of the Medical Society, having the largest membership in the world. In these honors, by the laws and privileges of a common fraternity and relationship, this society, city and state all participate, without detracting aught from him who is the merited personal recipient. Again I bid you to look forward to the future, and address yourselves courageously and hopefully to its duties and its rewards. Napoleon was wont to act upon the offensive, advance upon and seize opportunity, and thus by celerity of movement and anticipation extort victory from elements apparently adverse. To one and all of these my friends, I say all hail to the future! advance and meet it in its coming; rise to the level of your great opportunities: let earnest zeal and persistent activity characterize your conduct: adopt as your motto the orator's essential factors of eloquence, action! action!! action!!! Whatever of fruitage or trophy other years may have achieved, may the ensuing year in interest and profit at least be equal to the best: And I exhort each member, by regular attendance and frequent contribution, to strive for this realization. Do not, I entreat you, permit the sentiment of individual personal responsibility, to be merged into and lost in the general. The history of the entire year 1882 will be of that character which you shall impress upon each weekly session.

And now, in fine, to the honors which your friendship and confidence have conferred upon the speaker, he is profoundly conscious, attach grave responsibilities. In respect to these, he pledges himself to their faithful and impartial performance, and to withhold no effort in order that your reasonable expectations may be realized.

Asthma from Nasal Disease.

DR. MULHALL.—Mr. President: Some of the gentlemen will remember the case I presented some weeks ago. It was one in which th re was asthma with a nasal disease; and at that time I suggested that the cure of the nasal disease would cure the asthma, and it was then suggested that I should bring him again after the removal of the polypi. So I brought him here to-night. His asthma was very severe. I don't khow that there was anything in the general symptoms to distinguish this from an ordinary case of asthma. I operated upon him on Sunday, Dec. 4 and removed seven gelatinoid polypi from his nose. The immediate results were that on that night he was not able, as usual, to sleep until about half past two, but at that time he went to sleep and slept until about half past five, a thing he had not done for three months, that is to sleep for three successive hours. Next day he was able to walk much better than he had been for some months. The dyspnœa disappeared immediately on the removal of the growths. He had a very severe cough at the time, and that did not disappear until perhaps three weeks after the removal of the growths. Prior to the operation he weighed one hundred and forty pounds; he gained, the first week after the operation, four pounds; the second week five pounds; the third week four pounds; the fourth week four pounds; and the last week three pounds; so that now he weighs one hundred and sixty pounds. That is the best proof of the prognosis that the removal of the nasal growths would cure the asthma. When the patient was here before, he was hardly able to drag himself across the room; he is now able to walk erect, is strong, and almost as active as he ever was before the asthma came on.

DR. PORTER.—This case is important, and the Doctor and his patient are to be congratulated upon the result of treatment. It is but a few years since the first case of this kind was reported, and there have not been more than six or eight—at most not more than a dozen—of these cases reported all over the world. This is a case in which reflex asthma was caused by local irritation in the upper air passages, and it has been cured without farther treatment than the removal of the obstruction or irritating growth. The improvement of this patient is apparent in his face. When the man came to the society the other evening,

many of us suspected that there was true tubercular lung disease, and he has improved since the operation without any other treatment.

There was bronchial spasm, for, as suggested at the previous meeting, asthma is a symptom more than a disease. One explanation of it, as in this case, is that the nostrils are closed, or partially closed by the obstructing growth, so that when inspiration takes place, the air in the upper pharyngeal region becomes, to a certain extent, rarefied as the air cannot pass through the natural channel, but through the mouth. As the air in the superior pharyngeal region becomes rarefied, congestion takes place. I have on record one case very much like this, with entire relief, and another one in which I am told that the disease has returned, and still another in which there was no growth of polypi, but a thickening of the mucous membrane, a spongy thickening, soft and easily pressed aside by the probe, and reducible at times by means of astringents. The last case is yet under treatment, and I hope the result will be successful as Dr. Mulhall's case. The point should be borne in mind that asthma long continued may give rise to local lesion of the lung, emphysema and bronchial disturbance. These may remain a long time after the removal of the local trouble.

DR. FAIRBROTHER.—To me there is nothing more interesting in the whole realm of medical observation than these cases illustrating reflex action. And I don't know why this case may not be explained entirely as a case of reflex action. The explanation given by Dr. Porter, concerning the air being rarefied, takes away something of the interest in respect to its being a case of mere reflex action. If it is a well defined case of typical asthma, with the spasm and other symptoms belonging to asthma, and all these symptoms disappear upon the removal of these growths in the nares, the connection between the two seems very clear, and it is just as easy to accede to this explanation of the cause of the asthma as it is to accept the explanation of other cases of reflex action. We know that tickling the nares will sometimes produce a tear from the eye; and it can be explained on no other ground than that of reflex action. A piece of cinder in the eye may produce epilepsy by peripheral irritation producing central irritation. The fact of these irritating surfaces being near together doesn't militate at all against there being

reflex action. It is just as natural and easy to have reflex action in the pharynx from the posterior nares as it would be from any other part of the body. So that to me this case is a beautiful illustration of reflex action. Of peripheral irritation producing central lesion, and that again being reflected to the periphery, producing lesion there.

DR. HODGEN.—I only rise to give strength, if possible, to the position that Dr. Fairbrother has taken in regard to this case. It seems to me there is no reason why we should assume that a partial vacuum is formed in the upper pharyngeal space, and that a congestion in consequence of this partial vacuum results, and that the irritation, aided by that congestion, is necessary to the disturbance which results in the spasm of the bronchial tubes. One of the most familliar reflex acts of which we have any knowledge is that of sneezing. An irritant is applied to the mucous membrane of the nose, and impinges on the fifth nerve, a disturbance occurs at this point which passes to its centre and the result is a violent spasm of the respiratory muscles, The presence of a foreign body in the nostrils will produce greater congestion than will be produced by any congestion of the upper part of the pharynx due to a possible partial vacuum, even if we assume that such a thing actually occurs.

If you remember the anatomy of the parts you will recollect that the upper pharyngeal space communicates very freely with the lower pharynx. The opening between them is large enough to allow the air to pass without the least resistance. There could be only the faintest presence of a vacuum in the upper part. There could be almost no vacuum, no diminution of atmospheric pressure there; so that really, I don't see any reason for assuming that there is such a partial vacuum. It seems to me that it makes the route more circuitous to arrive at a conclusion, it makes the case more obscure. It is much more distinct and plain to assume that such a condition is not necessary to the production of the result.

DR. MULHALL.—One point has been lost sight of in the discussion of this case. The majority of us regard this asthma as only a reflex symptom of disease situated elsewhere, in the majority of cases, and this anatomical connection to prove the reflex action doesn't exist, at least not very accurately. The nervous connection between the situation of the disease and the

pneumogastric nerve doesn't exist. We have the asthma of a central origin, a congestion, or lesion which skips from one centre of the fifth nerve to that of the pneumogastric, but the fact is that the man did not breathe through the nose, but through his mouth, there was oral breathing. I think that the fact that the cold blasts of air, and the impurities which are liable to enter the mouth, and not apt to enter the nose, would partially, if not wholly, account for reflex symptoms. We would at least have an anatomical connection to explain the reflex symptoms The pharyngeal nerve would be brought into contact with the cold air and impurities, so that there would be a distinct connection with the pneumogastric. I don't know that the nasal disease was the cause of the asthma, perhaps it was the oral breathing.

Dr. Hodgen.—In reference to Dr. Mulhall's statement, it will be remembered that the pneumogastric nerve in its distribution, is a motor and sensory nerve, in its origin it is purely a sensory nerve. It receives motor filaments from the first and second cervical nerves, from the portia dura of the seventh pair, from the hypoglossal nerve, and from the spinal accessory nerve, so that the impurities do not go centripetally to the root of the pneumogastric nerve. The central termination of the fifth nerve may be connected with it or any of the other five which I have named.

Dr. Porter.—The theory which I have advanced has been a matter of some study, and I am not yet ready to abandon it. What did you tell us was the anatomical situation of the polypi, Dr. Mulhall?

Dr. Mulhall.—It did not go farther back than the junction of the anterior two-thirds, and the posterior one-third of the middle turbinated bone. It was not in the pharynx proper at all, so that the polypi did not affect the pharyngeal nerve at all.

Dr. Porter.—So that we are reduced to one of two theories, either the reflex action arose directly from the polypi by the roundabout way of the communication of the origin of the fifth nerve with the motor supply of the pneumogastric, or else by the theory that I have stated, the rarefaction of the air in the upper part of the pharynx. It is true that we cannot always account for reflex action, nor can we tell why it should pass from one part of the body to another. If there were no better,

no more direct way by which this reflex action could be accounted for, then we could, for a time at least, be obliged to accept the one given by Drs. Fairbrother and Hodgen. The upper and lower pharyngeal spaces communicate freely, and the air in natural breathing comes through the nostrils; but if the nostrils are closed, then the pharyngeal space is no longer a channel for the transmission of air, but a closed cavity; then if the current of air passes along the lower pharyngeal opening through the mouth, certainly there will be a degree of rarefaction; and it doesn't take a great amount of rarefaction tc produce congestion. The congestion of the mucous membrane supplied by the pharyngeal plexus of the pneumogastric, originates the impression reflected to the bronchial distribution directly. This seems to me more direct than the other.

Section of Skull removed from Baber.

DR. STEVENS.—I wish to say a few words on the Baber case. I have the specimen which was removed from the skull of Baber immediately after the execution, by Dr. Ludwig. You will remember that the plea of insanity was based partially upon the fact that he had a depression of the skull. It was proven that when he was seven years of age he had fallen a height of ten feet upon a pile of china and glassware, lacerating the scalp very excessively and fracturing the skull. Those were the facts. There was upon the left side of the head a depression almost large enough to lay the finger in. It was from four to five inches in length. I and all the other physicians supposed that there was a depression in the internal table of the skull; but the post-mortem examination showed no fracture of the internal table of the skull, the diploë was not fractured. The dura mater and the brain beneath the left hemisphere, and also the meninges of the brain, seem to be in a perfectly sound and healthy condition. The testimony in the case cannot be reverted to of course, at this late hour.

SATURDAY, Jan. 21st, 1881.

Scirrhus of the Prostate Gland. By F. W. Wesseler, M. D.

Mr. F. L. aged 50, married, of previous good health, never had syphilis, sent for me Jan. 29th, 1879, to relieve him of most excruciating pain about the hips and loins. As he could not

locate his pain definitely it was difficult to decide whether to call it sciatica, rheumatism or some disease of the bladder. While able to be about, he had visited a number of physicians to get an opinion, on which (he being a hospital steward) he would treat himself. The gum catheter with which he drew off his urine could no longer be introduced. Finding it impossible to introduce any kind of an instrument into the bladder, I deferred making a diagnosis and ordered hydrate of chloral and morphia to relieve his suffering. The prostate being enlarged and the neck of bladder very sensitive, I ordered ext. belladonna externally; internally, ten grain doses of quinine occasionally with demulcent drinks were administered. But the inability to empty his bladder continued. There was a constant dribbling of urine and great pain towards the rectum.

On Feb. 26th, Dr. Hodgen saw the case in consultation, who expressed the opinion that the enlargement of the prostate was most probably malignant, and that the patient would never recover. Iodoform and morphia suppositories were ordered once in six hours; internally, tonics, beef tea, etc. On March 16th, Dr. Gebrung of this city, also saw the case and agreed with the previous opinion and treatment. I will say that I also consulted with Dr. Vollum, Surgeon U. S. Army, who visited the patient frequently. All treatment being of no avail, it was concluded to give him plenty of morphia to relieve his suffering and await developments.

It was not until the 26th of October when I was again sent for. These months of constant suffering had changed the fine looking man, with a robust constitution, into a skeleton. I found my patient vomiting and purging, with anxious expression of face, and restless. Complained of great pain over pubes. Water dribbling from him as before. Ordered a tea made of uvi ursi fol. and hops, adding some bicarb. soda, and added to each dose of morphia which he was taking $\frac{1}{60}$ grain atropia. This afforded but slight relief. He declared that something had given way inside, and that he could not possibly live. His anxiety and restlessness increased, until he passed into a semi-comatose condition that continued until death, which occurred Nov. 3rd, 1879. Six hours after death, a post-mortem was made, at which Drs. Starkloff, Hickman and Lutz assisted. The body was greatly emaciated, with the odor of urine predominating. There was urinary infiltration of the cellular tissue of the anter-

ior part of the perineum and abdomen. A sack of pus was located between the pubes and the bladder with an opening into the latter, causing the cellular infiltration. The tumor had its origin in and involved the prostate gland, was about the size of a large hen egg, very firm and hard.

DR. HURT.—Constant dribbling is a symptom of over-distension, and that is evidence that the patient was suffering from uræmic poisoning. A tumor the size of a hen's egg at the neck of the bladder would not kill him if you kept the bladder empty. Aspiration would certainly have been effectual in relieving the bladder. But then of course that would have to be repeated once or twice every 24 hours, and that would not have been borne very long without symptoms that would have been nearly as bad as over-distension.

DR. WESSELER.—I had some experience with aspiration of the bladder shortly previous to this, and my experience did not encourage me to try it again. The urine was drawn with a trocar, perhaps a dozen times when uræmic infiltration took place; almost the same as it did in this case, and killed the man. Of course over-distension is apt to produce such pressure that an abscess is formed, or the bladder is ruptured, and uræmic infiltration takes place, and the patient may be poisoned and die. The case in which I aspirated died in a very short time. The patient didn't live three or four months or as in this case, six or eight months; from January 26th, to the 3rd. of November. I am satisfied if I had aspirated the bladder, he would not have lived more than two weeks. The final result would have been the same, but he would have died in a much shorter time.

DR. POLLAK.—I would like to ask Dr. Wesseler where he aspirates?

DR. WESSELER.—Through the rectum.

DR. POLLAK.—That is the only place we can aspirate.

DR. A. GREEN.—Why could we not aspirate above the pubes? We could introduce the aspirator above the pubes without injuring the peritoneum at all. In such a case as that which Dr. Wesseler reports where there is no hope for the patient anyhow; where we know that it must prove fatal after a time, wouldn't it be advisable to try to make a permanent opening above the pubes

and into this opening introduce an elastic tube, in order to allow him to urinate?

DR. BORCK.—The doctor says that the case discouraged him from aspirating the bladder. I don't think that one case should be taken as a criterion. I think it is preferable to use the aspirator, rather than the trocar. There are cases on record where aspiration has been performed 60 or 80 times. The patient is not injured near as much by the aspirator as by the trocar. I see no reason why we could not make an artificial opening and produce an artificial penis. I think it could be done just as well as not. We have fistulous openings in the bladder of the female through which the urine dribbles away; why could we not have them in the male? I would try the experiment if any one would let me.

DR. JOHNSTON.—Dr. Borck recommends extreme measures. He states that an incision has been made above the pubes, cutting through the bladder: I can't call to mind such a case in my reading. I know that the German surgeons have performed some extraordinary operations whether the bladder has been attached to the walls of the abdomen I don't know. Puncture of the rectum is the old practice, and I have seen a good many cases of puncture of the rectum that went to the grave. Puncture through the rectum 60 times would not have been borne. You can aspirate above the pubes, but I think in the course of time, that would produce inflammation of a character that it could not be controlled.

DR. STEVENS.—The suggestion of Dr. Green seems to me impracticable. I don't think it could be accomplished to advantage. In the first place I do not believe that an opening into the bladder above the pubes could be made at any other time, except when the bladder was distended. When the bladder is in an empty state, the upper extremity falls below the level of the pubes, it would leave that part of the pelvis in which the puncture is to be made. If the bladder is punctured while it is in the distended state, it would strike the middle of the bladder, and then, that part would be drawn away from the opening in the abdomen. It seems to me it would be impossible to form an attachment between the walls of the bladder and the opening. The retraction or falling away of the bladder would militate against it;

and the infiltration of the urine would interfere with the healing process.

DR. A. GREEN.—We can inject the bladder without infiltrating the cellular tissue. Artificial openings have been made into the stomach and I do not see why it could not be done here.

DR. MCPHEETERS.—The post-mortem report is imperfect; I don't know how uræmic poisoning resulted. If there were a rupture of the bladder, the patient would die from peritonitis. If the kidneys were diseased there would be a suppression of urine. If there is infiltration, there must have been an opening in the bladder, and the patient would die of peritonitis, rather than of uræmic poisoning. Infiltration wouldn't cause uræmia.

DR. HURT.—My idea is that from overdistension of the bladder, the urine regurgitated back upon the kidneys through the ureters. Is it not possible for that to take place?

DR. BERNAYS.—I had occasion to examine this specimen in the performance of the post-mortem, and I found it to be a scirrhus cancer. It was a clear case of cancer of the prostate: which had become enlarged so as to be about the size of the fist, and had attacked the connective tissue between the bladder and rectum, and also around the anterior surface of the bladder. Speaking of the operations to remedy the trouble, I would say that an extirpation might be performed. The rectum could be made a receptacle for the urine also. We leave the sphincter intact, and perhaps the sphincter ani might have contractility enough to cause a certain amount of retention of urine, so that the patient would not be troubled with a constant dribbling of urine. I don't remember a case of the kind, but I have seen a case where there was a fistula between the bladder and the rectum, in which the sphincter was strong enough to hold quite an amount of urine, and I believe the operation might be performed in a case of malignant tumor without any great danger. The operation itself certainly would not be dangerous; but there might be danger of cellulitis on account of the infiltration of the urine. This might be remedied by uniting the mucous membrane of the rectum with the mucous membrane of the bladder then there would be little danger of infiltration of urine, and little danger of pyemia. But I think we could let the bladder alone and dissect out both ureters, and fasten them into the rectum. I think that is a much better operation.

DR. JOHNSTON.—I wish to mention a case. A little child was vaccinated with bovine virus, and it took well: About the 7th or 8th day afterwards, the child broke out with from 50 to 100 pustules, which extended all over the child from head to foot. In appearance it was varicella, and as there was some fever, I pronounced it a case of varicella or varioloid. The eruption was attended with a good deal of itching, and remained out about eight or ten days. I don't know whether such an effect frequently follows vaccination with bovine virus or not.

Extraction of Teeth in Pregnant Women.

DR. BORCK.—I would suggest a question. Is it advisable to allow the extraction of a tooth, or of teeth in a patient who is pregnant? Several times I have been asked this question by dentists. Some eminent dentists are afraid to extract an aching tooth because the patient is pregnant. They are afraid of producing an abortion.

DR. GREEN.—The extraction of a tooth in a pregnant woman does not necessarily produce an abortion. Of course there may be instances where such an effect would follow, but if the woman is suffering and we cannot relieve her by any other means I would recommend the extraction of the tooth.

DR. MCPHEETERS.—There is a form of tooth-ache which is sometimes a symptom of pregnancy. The teeth are sound, and of course it would do no good to extract them. I should not hesitate to advise the extraction of a carious tooth, but in case of this neuralgia which sometimes accompanies pregnancy, I should advise against it because we sacrifice the tooth uselessly.

DR. HUGHES.—I don't suppose we can adopt any one rule that will apply to all kinds of patients. Some patients when pregnant are extremely hyperæsthetic, the hyperæsthesia extends to the branches of the fifth pair; other women who are more or less nervous when not carrying a child, seem to possess more nerve then, than at any other time; they seem to be in a better condition. I don't know, in view of the varying and variable physiological condition in which we find women in the pregnant state, that we could arrive at any definite rule applicable to all cases. I suppose, however, that Dr. Borck has reference to the propriety of extracting decayed teeth—teeth which are themselves the peripheral source of great central irritation. Of course

no one would think of taking out sound teeth to relieve a neuralgic condition. The question, ought a tooth to be extracted from a pregnant woman, is not a question upon which we could ever arrive at any definite conclusion which would embody a rule, and therefore it would be fruitless to engage in its discussion. If the question is asked, under what circumstances ought the removal of a tooth to be advised during pregnancy, you have a question that might be discussed. It is simply a question of individual temperaments, of conditions of the patient, and of the existence of centric or excentric irritation; the existence or non-existence of central or peripheral irritation. And, if a pregnant woman is extremely hyperæsthetic, and you can find a focus of origin for it in the peripheral irritation of a decayed tooth, there would be no impropriety in the majority of cases, I apprehend, in the removal of that decayed tooth. If in a condition of general nervous excitation, especially if centered in the brain or cord, you have any form of spasmodic display, and you find a possible peripheral source of the irritation, I think the general sentiment of the profession would concur in the propriety of removing that possible source of peripheral irritation. That is all there is to that question.

DR. JONASTON.—Some years ago I was called to a lady who had been married six or eight weeks. The second left molar was decayed and an abscess was forming, and protruded from the root of the tooth. The abscess was painful and I advised opening it. She consented and I took my lancet and opened the abscess. This produced a tremendous shock, and in 24 hours she aborted. This case occurring in my early practice has made me very careful about extracting a tooth from a patient during the early part of pregnancy if she were of a nervous temperament; it is a hazardous practice. But if the tooth-ache continues the reflex irritation of the pneumogastric nerve, connecting with the great sympathetic, may induce uterine contraction, and cause the woman to abort. In such a case we should recommend that the tooth be pulled. There is no rule in the practice of medicine; and no rule as regards drugs, except castor oil. I have given calomel for 20 years under the supposition that it acted on the liver, and now we are told that it doesn't act upon the liver at all.

DR. HURT.—I think we are all obliged to concede the possi-

bility of the extraction of a tooth during pregnancy producing abortion under certain conditions. There is no donbt also, that there are circumstances under which the extraction of a tooth during pregnancy ought to be advised. The loss of a sound tooth ought not to be allowed unless something is going to be accomplished by it that cannot be accomplished otherwise. But I would have no hesitation about advising the extraction of a tooth from a pregnant woman if it was absolutely necessary to relieve her from a distressing, harassing pain that was wearing her out; and in doing this we may administer an anæsthetic without interfering in the least with the pregnancy. When she is under chloroform or ether we obviate the shock which is usually attend ant upon the extraction of teeth. And experience has taught that pregnant women are very tolerant of these agents.

DR. MCPHEETERS.—My friend Dr. Johnston says he has been using calomel 20 or 30 years and supposed he was acting upon the liver. I have been using it 40 years and I know I have been acting upon the liver. But some years ago some scientific fellow performed some experiments upon the dog with calomel, and finding no biliary secretion, concluded that calomel does not act upon the liver. Dr. Johnston accepted this theory and threw away his experience of 30 years. We know that hogs eat arsenic in large quantities and that it produces no deleterious effects in them; and yet its effect upon the human being is most deadly. We should rely upon our experience and not take the result of these so-called scientists. Now, sir, that calomel does act upon the liver is just as certain, as that quinine is a remedy for intermittent fever, and yet I don't know how it may act on dogs. The doctor has read so much he has become mad.

DR. JOHNSTON.—The poet says:

> "Some books are lies from end to end,
> And some great lies were never penned."

For 100 years the doctors of England and America have been taught that calomel when taken into the system by the cappilaries selects the liver upon which it produces an irritation, and causes an increased secretion of that substance we call bile. A few years ago a hard headed Englishman examined all the secretions of the body, and amongst other things he gave a healthy man large doses of calomel, and he found that there was less bile when he used calomel, than there was when he did not.

If the doctor will investigate these matters he will find that it is not Dr. Johnston, but Dr. McPheeters who is mad.

DR. KINGSLEY.—One word in regard to calomel. Perhaps some of you may not have administered calomel in small doses. Bartholow calls the attention of the profession to the fact that one grain of calomel will act upon the bowels the following morning after its administration at night. Frequently half a grain is quite as efficient. I am in the habit of administering one grain doses and I find that it acts upon the bowels. As far as the action upon the liver is concerned. In 1865, Dr. Hodgen was lecturing on physiology, and I remember that he made the statement at that time, and I think the doctor still believes it, that castor oil had as much effect upon the liver as calomel.

SATURDAY, Feb. 4th, 1882.

Vaccination and Small-pox

DR. STEVENS.—I rise simply to request those who have not read Dr. Spinzig's article on vaccination, to procure it and read it. I was presented with a copy immediately after its publication, and thought I read it. I find now, within the last week or two, that I did not read it; I merely glanced over it. I didn't know what it contained; I was prejudiced against the position taken, so that I did not properly appreciate the work. I have recently read it and re-read it, and I advise my friends to read it; not merely to scan it, but to read it carefully; and those who have read it, to read it again and consider the subject as he presents it. I think we should consider the figures taken from the United States statistics, which he uses to back up his doctrine. The figures of deaths from contagious diseases as taken from the reports of 1870 (those for 1880 not being out), were as follows: small-pox, 4,507 deaths in the United States; from measles, 9,237, twice as many as there were from small-pox; scarlet fever, 20,320; diphtheria, 6,304. Now why do we discriminate against small-pox, and establish a pest-house fifteen miles from the city when we have twice as many deaths from measles and five times as many from scarlet fever? I simply wish to call attention to the publication of Dr. Spinzig, and I hope every member will read and consider the subject.

DR. WILLIAMS.—I would like to inquire if Dr. Stevens endorses Dr. Spinzig's ideas?

DR. STEVENS.—I do not say I endorse his position, but I feel myself very much enlightened by having re-read the work. I don't know that I endorse his ideas, but I do know that it has modified my views considerably in regard to vaccination and specific contagion and so on. I think we have generally read this work too superficially.

DR. GREEN.— I would like to make a few remarks in regard to the statistics which Dr. Stevens has brought before us. According to those statistics the deaths from measles exceed the number of deaths from small-pox. Now in the first place those statistics are wrong. We have no statistics showing the number of cases of each disease which occurred; we simply have the number of deaths. Now we know that every person has a predisposition to measles. If he does not get it when a child, he will get it when he is grown; so that the number of deaths from measles is actually very small because every person almost without exception, gets the measles. And if we did't practice vaccination, as a matter of course, I think every person would be just as much predisposed to small-pox. Of course, when a child is attacked with the measles it is liable to die; but as a rule, they get well.

DR. STEVENS.—Do you entertain the same view in regard to diphtheria?

DR. GREEN.—We have diphtheria which accompanies scarlet fever, and we have it sometimes as an epidemic with scarlet fever—it is really scarlet fever without the eruption. Diphtheria is actually more scarlet fever than anything else. Now scarlet fever is certainly a very formidable disease. I don't know that it is less so than small-pox. There is no disease that is more deceptive than scarlet fever. Here you find a child who is scarcely sick at all, and then you see one who is sick in the last degree. And then there is another point in regard to taking measures to isolate these patients; we seldom see a grown person with scarlet fever. Then the predisposition to scarlet fever is not so great as it is to measles or small-pox. Whenever I see a case of scarlet fever, I say take away your children. But the predisposition to scarlet fever is not so great as the predisposition to small-pox.

DR. HURT.—The figures as read from the United States cen-

sus report for 1870, were: from small-pox there were 4,507 deaths, from measles 9,237, from scarlet fever 20,320. Knowing the susceptibility of the human race to these diseases, we can not say that small-pox is not quite as contagious, in early life especially, and the fact that there were 4,507 deaths from small-pox, 9,236 from measles, and 20,320 from scarlatina, is one of the strongest arguments in favor of vaccination that could be advanced.

DR. FAIRBROTHER.—I would refer briefly to a case illustrating the effects of vaccine virus upon persons already affected by the poison of small-pox. A woman came under my care with a bad form of variola, of which she died. She was a married woman and her children, three little girls, were always with her. Forty-eight hours after the eruption appeared, I vaccinated these children, not being able to procure virus any sooner. The vaccination took well in every case, and at the end of a week there were two good vesicles on the arm of each child. During the second week, and about twelve days from the date of theeruption of the mother, the youngest of the children manifested the primary symptoms of small-pox, which in due time becam edeveloped into a moderate caseof the disease, from which she recovered in about two weeks, time with little trouble. The other two, both had mild forms of the disease, with which they were not confined to their bed at all, and, on recovery, had not the slightest trace of the disorder.

DR. ANDERSON.—I think it would be interesting to call the attention of the Society to the report published in the papers lately; that there had been several cases occurring in this very limited epidemic, in which the disease had occurred more than once. I saw in the paper that there was a patient now suffering with the disease at Quarantine, who had it, this is the fourth time, in a limited number of years; and also referring to several cases in which the disease had occurred for the second time. Considering the small number of persons affected, it seems rather a remarkable fact, one that did not come within the scope of my previous experience, that so large a number of persons had a second attack.

DR. DUDLEY.—I noticed the statement that Dr. Anderson referred to in the daily papers as occurring at Quarantine hospital. A nurse at the hospital, it was said, had been affected with the disease for the third time. And it recalled to my mind the fact that when I was in connection with the prison hospital,

during the war, we had quite a number of cases of recurrent small-pox. We were scarcely ever without small-pox within the confines of the walls of the institution; we couldn't banish it entirely; it seemed as if the bunks and the quilts and the bedding, were so completely saturated with the virus that we couldn't get rid of it. And during that time I saw a number of cases of the recurrence of small-pox—some where the patients were well-marked. I don't know that I remember an instance where it occurred more than the second time; it may be that in some cases it occurred a third time. It presents to my mind a question of considerable interest, which I would like to hear discussed by those who are more competent to do so than myself. I see present, a gentleman who I remember during the war had charge of the small-pox hospital, then located on an island in the Mississippi River, and it is possible that he remembers many cases where it occurred more than once.

DR. HICKMAN.—I presume Dr. Dudley alludes to me, and it is only fair for me to answer the observation made by Dr. Anderson. In the first place in regard to the article which appeared in the papers yesterday in regard to some extraordinary cases, or at least one extraordinary case of the repeated recurrence of small-pox in the same person, I must confess that on reading the article I thought: what disease had the patient when he entered the hospital, and I came to the conclusion that he probably had the measles or the scarlet fever, or else the chicken-pox. I remember that during the time I had charge of the small-pox hospital, it was neeessary to have a ward for these doubtful cases. I myself, have very grave doubts whether small-pox does recur. It is stated in *Reynold's System of Medicine*, and the article upon small-pox is written by Dr. Marson (?) who for many years had charge of the London small-pox hospital, that during sixteen years, during which time a very close observation was made of all cases, only forty-seven cases were recurrent out of five thousand, and in these cases there was no evidence of a previous attack but the patients' statements; and that during the period of the establishment of the hospital, some one hundred and fifteen years, no patient was admitted twice for small-pox, and the fact is they were led to the conclusion that there were recurrent casees, largely from observation and from the state-

ments of the history of cases by the patients themselves. During my observation on the island for four years, and including some housand cases, I never saw the same patient admitted twice. I certainly had patients sent over there, who had pustular diseases which were not true small-pox, and it is just possible that, under the improved system in which the health department is being managed, such cases occur. I remember well that Dr. Dudley, when he had charge of the Gratot Street prison, sent me over a couple of rascals who simulated the disease so well as not to be guarded very well and before morning made their escape.

DR. SCOTT.—In my practice I have seen cases where small-pox occurred the second time well marked. The first was the case of Prof. Motling, of the High School. I was called to see him one evening, and he seemed to be laboring under a bilious attack, with a pain in the back. I prescribed for him, and next morning I made a second visit and discovered an eruption upon his face. I said to him: I believe you have got small-pox. He said: I guess not Doctor, I have had it once, and he showed me some pits well marked, upon his face. Well, I said, it looks very suspicious, but I reserved my diagnosis until the next day When I called the next day he said: "I guess you are right, I have got it." And he had a beautiful attack of small-pox, being his second attack. The next case was a little Irish boy, on the corner of Mound and Second Streets. This boy was well marked from the first attack of small-pox. He had lost one eye from a pustule that went through the coats of the eye. That little fellow had another attack and was taken to the small-pox boat. At that time they had a small-pox boat that lay at the foot of Mound Street, which was in charge of Dr. Puellman. The little fellow was sent on the boat and died there. Of course, I think that such cases can occur. I remember that, after seeing the first case of scarlet fever occurring twice in the some patient, I met my old teacher, Prof. Lytton, and as it was something new to me to have scarlet fever occur twice in the same patient, I said to him: "What do you think about this, I have been called to a child and the mother tells me it has had scarlet fever before?" "Oh" says he, "they can have anything twice but hydrophobia." And I think that is about the fact.

DR. HICKMAN.—I know that the statistics of the London

hospital show that it has occurred where the patients stated that they had had the disease earlier in life; but my observation has led me to the conclusion that patients are very often deceived; because I have seen a great many children pitted by attacks of chicken-pox, and other pustular diseases which leads them to appear later in life as if they had varioloid.

DR. POLLAK.—I can state that I have at present under treatment a girl on whom vaccination has taken beautifully, and yet she had small-pox five or six years ago. She is an inmate of the school for the blind. She is very well marked from the small-pox. Now, as the vaccination has taken, I conclude that she would have been susceptible to the poison of small-pox if she had been exposed to it. And further, in my earlier practice I attended a man who had small-pox, and a very bad case; he got over it however and was married several years after, and had a family, when he was again taken with small-pox.

DR. JOHNSTON.—In regard to the recurrence of small-pox, I would say that some years ago I was called to two little girls who had the small-pox, and both recovered. In July following, a girl in the next house was taken with the small-pox and these little girls went in to see her, and one of them took the small-pox again and recovered. This was in 1863 and Dr. Tuholske was in charge of the dispensary, and he ob[illegible]ved the same thing in another child. Students of the histo[illegible] of small-pox know that it does recur if human evidence can[illegible] believed. Anyone who reads Gregory's work cannot doub[illegible]is.

Poisoning from Sulpho-Cyan[illegible] of Mercury.

DR. LOVE.—I might relate a case [illegible] t came under my observation yesterday afternoon which w[illegible] ery interesting and novel to me. About three o'clock I w[illegible] alled hurriedly to see a patient about a block from my [illegible]e. The messenger stated that it was a child who had been [illegible]soned, and as I hurried to respond to the call, I revolved through my mind the various forms of poisons and their antidotes. When I arrived at the house they told me that the child had swallowed something, the composition of which they did not know. Then they explained to me that they had in the house a toy, possibly some of you have seen it, they are sometimes represented as dogs, and then a small piece of substance, as large as a grain of wheat, is placed in the fundus and set a fire, and there is an abundant discharge.

In this case the toy represented a boy and the portion of substance was put in the mouth representing a cigar; this was lighted and then you have the representation of a small boy sick from his first cigar; there is a very free discharge from the mouth. This at once suggested to my mind the toy known as Pharaoh's serpent, which is usually made about an inch long, and of a conical shape, and the first thing that entered my mind was, what is the composition of it? I thought it was probably corrosive sublimate, and on general principles I asked for lard and eggs. I took three of four of the eggs and forced them down the child's throat; I then got it to drink some milk, and in the meantime a servant had gone to a drug-store three or four doors off for some ipecac, and I gave three or four teaspoonfuls forcibly, as the child was only 19 months old; so that I could'nt consult it. I then forced some hot water down its throat and stuck my finger as far down as I could. There was thorough emesis and I, as well as the other occupants of the room, was covered with the contents of the stomach. I then filled it up again with warm water and stuck my finger down its throat again. This was instead of the stomach pump, and answered the purpose. The child vomited directly. I then started to the drug store to ascertain the composition of the toy, and on the way I met Mr. Hollister who formerly had a drug store on 14th and Market, and asked him if he knew what the composition of Pharaoh's serpent was. He said it was a solution of cyanide of mercury. Well I felt that this was probably somewhat similar—that it was a corrosive sublimate, and that I had'nt been very far wrong. I then investigated by looking into Parish's Pharmacopœia, and I found a description of the toy; and found that I had done about right, except that I should have given some sulphate of iron. I took some with me, with a view of giving it to reach any that had been retained in the stomach. When I returned in about ten minutes, I found that the child's mouth, neck and hands upon which the contents of the stomach had fallen, were almost blistered. This was still farther evidence of the corrosive character of the substance. I then filled the child up with a solution of iron and bicarbonate of soda; and soon after this was vomited, I commenced to give vaseline, maltine, etc., for their soothing properties. I called again in an hour and found the child ready to play in its mother's lap, but as it had vomited again once or twice, I prescribed creosote, bismuth and lime-

water. I saw the child late last night and found that where it had touched its face with its hands when they were covered with the matters thrown from the stomach it was almost blistered. The eyes were nearly closed. I applied the same treatment that I had given internally, using lime-water and so on, and this morning the child was very comfortable, playing about the room. The swelling had subsided. I don't know that there is any evidence of gastritis, and I hope we will not have. It seems to me that it is a great outrage that such dangerous toys are sold. I must admit that I did not know the composition of that particular toy before.

DR. FAIRBROTHER.—I would like to ask Dr. Love if the parents knew anything about the toy, or whether the child had eaten the toy? I understand that it is hard and insoluble, and not sweet. The question is how the child got it in its mouth?

DR. LOVE.—This child was only nineteen months old and would swallow anything that it could get in its mouth.

DR. HODGEN.—I knew a child that swallowed a jack-knife.

DR. JOHNSTON.—How large was the jack-knife?

DR. HODGEN.—About as long as my index finger.

D . JOHNSTON.—How old was the child?

DR. HODGEN.—One year and five months. It passed without any discomfort.

DR. WILLIAMS.—In connection with the case of Dr. Love I will say that I saw Dr. Frazier, some time ago resort to a novel method to cause vomiting. A young child next door to my house took spasms from some cause. Supposing that there was something in the child's stomach that caused the spasms, we gave the chloroform and Dr. Frazier took a chicken feather and ran it down the child's throat. The contents of the stomach were thrown out and there were found several large pieces of unmasticated pickle and several other things, which evidently were the cause of the spasms. After getting these things out, the spasms ceased. But it struck me as being a novel mode of getting emesis.

DR. HUGHES.—I recollect trying that experiment in a case once when I first began the practice of medicine as a country physician. A patient of mine took five drachms of the acetate

of lead instead of a powder composed of calomel and jalap which I had prepared. I undertook to excite emesis by the method that I had learned from my old preceptor. I took turkey feathers and manipulated until I had worn out a dozen feathers in my fruitless efforts. The patient recovered.

Toxiphobia.

If there is nothing else before the society I will relate an interesting case of toxiphobia. You will remember Mr. President the case which I had with me when we were lately together in Illinois. These cases are not uncommonly associated with other forms of mental disease, and may pass into grave general forms of delusional insanity, though they frequently remain as monomania for life. Hammond calls this symptom mysobia; but before Hammond it was called toxiphobia. It is a symptomatic expression of mental disease that is rather exceptional, and it is well when one encounters such cases to make a record of them. This boy is 14 years of age and is the youngest patient in whom I have ever seen this phenomenon manifested; and I believe he is the youngest child in whom I have ever seen it recorded as appearing. It usually occurs in adults, and I believe that all the cases reported are of adults. Some two years ago Dr. Willis King of Sedalia, consulted me in regard to a case of pyrophobia in a little boy, which had for its foundation malarial congestion. The boy recovered under treatment. The boy would be the first one up in the morning and would hasten to the stove or fire place and remove the fuel, and interfere with the making of the fire, and attempt to put the fire out when kindled. His dread of fire was constant. The mental characteristics of this boy patient of mine are not unlike those of other boys except in this morbid fear of being poisoned. It had its origin in a disturbance of the brain produced by the discharge of a small toy pistol; a comrade snapped one of those toy pistols close to his ear twice, and from that resulted headaches, and fever and general disturbance of the head. During the last four months there has been no appreciable cause of the trouble. The boy had a slightly adherent prepuce, and circumcision was performed with a view of removing any possible reflex source of irritation, but without avail. The boy's general health is moderately good. He is not as active as he ought to be, and he lacks that mental spontaneity which is characteristic of

boys of his age. His mental powers are good in every particular with this single exception. He is not so playful as other boys, owing to the fact of the presence of this predominant idea. The idea first arose in his mind on seeing Paris green sprinkled on potatoes. Being an intelligent boy he knew what Paris green was, and associated it with the idea of poison. Then he read in some sanitary reports at his father's house that there was arsenic in the geeen wall-papers and he therefore dreads green paper. When he comes in contact with certain persons he always washes his hands to get rid of a supposed contamination. The boy has no malarial trouble, and there is no perceptible cause for it. I have watched him when asleep; and I had him at my own house; but he took the same delusion in regard to being poisoned in my house. There was a green colored foot tub in the bath room, and the dado in my dining-room has a predominance of green, although the upper part is gold; but he didn't think that was a good place to eat, and it became necessary to secure another place for him to board. I did so promptly in order not to lose the boy's confidence and in order to secure restoration. I expect he will recover. Such cases in this stage usually recover if the brain and general health are kept in good condition, and the patient constantly diverted from his delusion.

DR. DUDLEY.—Do you think his brain was diseased before this condition set in?

DR. HUGHES.—Yes; certainly, I think it was. I regard it as the result of disease. Now I want to make some deductions from this and similar cases. Here is a case of undoubted mental aberration circumscribed in its character. There is little doubt, that this trouble has had its origin in this boy's head from the effect of the discharge of the pistol. The physician who sent the boy to me was of this opinion. Dr. Brower sent him to me, and he is quite skilled in the detection of mental diseases and their causes. Now in this connection I will relate another case, one of kleptomania. We have often heard it said from very prominent sources that kleptomania is only and always stealing; that dipsomania is always drunkenness; and that moral and emotional insanity are terms invented for the purpose of shielding crime. Now these examples occur sufficiently often to convince any observing man, if they are carefully observed, that monomania is a fact of observation; that the human mind may

act in such a way as to form morbid conclusions in certain directions in consequence of disease.

A man was brought into court in Calloway County for stealing a number of valueless things, and finally a horse. He kept the horse three days going only six miles. His neighbors doubted his insanity and said there was nothing the matter with him, that he had stolen the horse with a purpose, and yet he hadn't gone more than six miles in 72 hours. That man was undoubtedly insane, and so his subsequent life proved, for he grew worse and was sent to the State asylum in a very maniacal condition. The Superintendent of the Fulton asylum told me, I think, he died at that institution. In the case of pyrophobia in the boy referred to, the boy was able to go to school, and nobody would suspect the existence of mental aberration. There is a practical point in these isolated cases of maniacal display; they show that the mind is capable of acting rationally on a wide range of subjects, and yet of becoming disturbed and acting abnormally by reason of morbific changes taking place probably in limited portions of the brain. Cerebral localization and monomanias confirm each other. Whether the mind acts *per se*, or whether it is an entity acting upon the brain in the healthy state, or whether it is an emanation from the brain, a secretion, function of the brain as well, is immaterial. No theoretical conception of this kind should be permitted to clash with observed facts. No careful observer takes his metaphysical conceptions into the sick-room and permits them to modify the actual function as he sees it displayed. Then why should physicians, in reasoning upon mental phenomena on the witness stand or elsewhere, permit any sort of metaphysical preconception as to what the mind is in his opinion, interfere with the display of mind as he sees it in the patients themselves. You can not, and ought not to endeavor to reason facts out of existence.

Dislocation of the Hip Joint.

DR. HODGEN.—I had a case of dislocation of the hip backwards of two week's standing. A boy had fallen through a hatchway and continued to work during the two weeks immediately following the accident, and up to the time of his admission to the hospital the day I saw him. He did not complain of any pain except when he stepped on the toes of the foot, and then there was not much pain; when he was lying or sitting

there was no pain whatever. There was no particular swelling about the part, and no increased sensibility. He remained at work constantly, and walked about; his business was walking from one part of the house to another. He worked in a pork-house. The shortening was about two inches, and the thigh was drawn forward and couldn't be brought down to the line of the axis of the body.

ARTICLE XLVI.

TWELFTH CONGRESSIONAL DISTRICT MEDICAL ASSOCIATION, of Missouri.

The fourth annual session of this body was held in Macon, Nov. 24th and 25th, 1881.

The following officers were elected for the ensuing year:

Presidents—J. D. Smith, M. D., Shelbina, Mo.

Vice-President—(One from each County):

J. Moran, M. D., Adair County.
J. Parish, " Scotland "
Sam'l Neeper, " Clark "
W. F. Mitchell, " Schuyler "
A. C. Berry, " Putnam "
E. D. Helm, " Knox "
W. V. Yates, " Macon "
R. N. Turner, " Shelby "
J. C. Hearne, " Marion "
R. C. Risk, " Lewis "

Recording Secretary—W. F. Morrow, M. D., Laplata, Mo.

Assistant Recording Sec'y.—Dr. C. L. Brown, Glenwood, Mo.

Corresponding Sec'y.—A. J. Norris, M. D., LaPort, Mo.

Treasurer—H. D. Matthews, M. D. Clarence, Mo.

Visiting Physicians—Willis P. King, M. D., Sedalia, Mo.

John Petty, M. D., Jacksonville, Mo.
J. Basket, " Moberly, Mo.
W. Byrd. " Quincy, Ill.

The forenoon session, after the election of officers, was taken up in the presentation and discussion of interesting cases.

The afternoon session was opened by an address by Dr. Byrd, and followed by Dr. King and others.

The evening session, at Bearne's Hall, was opened by prayer, by Rev. J. A. Mumpower, followed by an address of welcome by Rev. J. S. Thompson; a written address by Dr. T. J. Norris, subject: "The evils of the present system of Education," and an address by Dr. Willis P. King, subject: "The Quack Doctor and the Regular Physician."

At this session Bearne's Hall was well filled, and the entire programme apparently much appreciated by the audience.

The business of the association having all been transacted the first day, the sessions of the second day were taken up with the presentation and discussion of cases much to the interest and benefit of all present.

The Association adjourned to meet at Glenwood, Schuyler county, early in May, 1882. Due notice will be given of the day.

J. D. SMITH, M. D., President.
W. F. MORROW, M. D., Secretary.

Periscope.

Article XLVII.

MATERIA MEDICA AND PHARMACOLOGY.

Effects of Drugs in Lactation.—Dr. Dolan, continuing (*Practitioner*, September, 1881) his series of articles on this subject, from which we have already quoted, gives a case where fifteen grains of *chloral* were given to a patient every few hours before confinement, until seventy-five grains had been taken. No trace of chloral was found in the milk on the third day; but Dr. Dolan thinks chloral does have effect on the milk.

Calabar bean has been suggested as a means of restoring the suppressed secretion of milk. Dr. Dolan tried this remedy, but without effect on the flow of the milk.

Cod-Liver oil was given to two nursing women in the dose of one tablespoonful three times a day in a cup of warm milk. The children nursed as usual, and no physiological effect was produced on them. Linseed tea, beef fat, and mutton fat were administered to women with a view of ascertaining what, if any effect would be produced upon the amount of breast-milk secreted. In two cases effect was produced.

Castor oil was given to mothers in a number of cases. It always produced a purgative action on the child.

Of *cummin*, as of other aromatics, Dr. Dolan says, "I believe that I may formulate the law that they all impart a flavor and odor to human milk, without increasing the quantity or improving the quality of the secretion."

Of *conium* he remarks, "Most of the Umbelliferæ are readily absorbed by the lacteal vessels, and may be easily found in the milk. Conium, from its sedative action and its influence on the nerves of motion, could not be expected to increase the milk-supply. There are reasons, however, for its administration to mothers who are nursing, so that it is important to note how soon, if at all, it appears in the milk, and what dose produces an effect. Conium, praised by Störck for the cure of uterine scirrhus,

and by Dr. Tunstall for chronic inflammation of the womb, is an excellent sedative for back-ache and for the sexual organs. It must be given until its physiological effects are produced, and this means a dose of the succus conii B. P. of two or three drachms.

He administsred two-drachm doses of the succus conii every three hours to a patient until she had taken twelve drachms. Analysis of the milk then showed the absence of conium.

Digitalis infusion, in half-ounce doses every six hours, was given in three cases without any trace of the medicine being found in the milk.

Regarding *ergot*, Dr. Dolan says his results are negative or uncertain. Two grains every two hours were given to a nursing mother until twelve grains had been administered. The mother thought the child was affected, as it was cross and irritable. No ergot could be found in the milk, although it must be admitted that our present methods of analysis are unsatisfactory.

Of *iodide of potassium* Dr. Dolan says that in his experience it does not decrease the quantity of milk, although its prolonged use may deteriorate the milk by impoverishing the blood. He found iodine in the milk of a patient who had taken fifteen grains of iodide of potassium every three hours until sixty grains had been taken. A child eighteen months old, who had been given the milk from a woman taking iodide of potassium, showed iodine in the urine.

Of *mercury* Dr. Dolan's experience is inconclusive. In the two cases examined, no trace of mercury was found in the milk.

Opium, when given to the nursing mother in large doses, can be found in the milk. After small doses it cannot be detected.

Phosphorus was given to two nursing women in doses of one-thirtieth of a grain for fourteen days without any trace of the drug being found in the milk or urine. The *potash salt* and *quinine* do not, in Dr. Dolan's experience, pass into the milk. *Rhubarb* and *senna*, however, do, and produce their physiological effect on the nursing child. *Sulphur* and *turpentine* administered internally, affected the milk, the former acting as a mild purgative on the nursing infant. *Valerian*, and *copaiba* are also excreted by the milk.—[*Medical Times.*

DR. J. MILNER FOTHERGIL ON USE OF MALTINE.—In order to

aid the defective action upon starch by the natural diastase being deficient in quantity or impaired in power, we add the artificial diastase "maltine." But, as Dr. Roberts points out, in order to make this ferment operative it must not be taken after a meal is over. Rather it should be added to the various forms of milk porridge or puddings before they are taken into the mouth. About this there exists no difficulty. Maltine is a molasses-like matter and mixes readily with the milk, gruel, etc., without interfering either with its attractiveness in appearance, or its toothsomeness; indeed, its sweet taste renders the gruel, etc., more palatable. A minute or two before the milky mess is placed before the child, or invalid, the maltine should be added. If a certain portion of baked flour, no matter in what concrete form, were added to plain milk, and some maltine mixed with it, before it is placed on the nursery table, we should hear much less of infantile indigestion and mal-nutrition.—*London Practitioner.*

RATTLESNAKE POISON.—Dr. Lacerda Filho has published the results of his experiments on the poison of the rattlesnake (*crotulus horridus*) in the Archivos da Museu Nacional do Rio de Janeiro III–I. This poison acts upon the blood by destroying the red blood corpuscles and by changing the physical and chemical quality of the plasma. The poison contains some mobile bodies similar to the micrococcus of purtrefection. The blood of an animal killed by the snake bite, when inoculated to another animal of the same size and species, causes its death within a few hours, with the same symptoms and the same changes of the blood. The poison can be dried and preserved for a long time without losing its specific quality. Alcohol is the best antidote to the poison of *Crotulus horridus* known until now.—[*Medical Annals.*

ŒNAS AFTER AS A VESICANT.—In the *Siglo-medico*, Prof. Armengué, of Barcelona, detailed several experiments which lead him to recommend the œnas afer as a vesicant. The preparation is said to be prompt and certain in its action, and never painful. In every case the insensibility was extraordinary. The serum was clear and abundant, except in one case, in which it was bright yellow. No genito-urinary symptoms were produced, perhaps on account of the small quantity employed. The œnas afer is an insect whih is quite common in certain parts of

Spain. The author thinks it should rank higher than, or as high, as the cantharis.—[*Medical Record*.

ARTIFICIAL HUNYADI JANOS WATER.—The natural Hunyadi Janos water was observed to be an efficient, safe and agreeable purgative in many chronic cases. It is, however, found to be too expensive for hospital use, and it was resolved to try it artificially. At first it was made according to Liebig's analysis of the natural water, but this was perceived to be too weak, and it failed to produce purgative action. Ultimately it was made thrice the given strength, according to the following recipe:—Sulphate of magnesia, 514.92 gr.; sulphate of soda, 519.54 gr.; sulphate of potash, 2.76 gr.; chloride of sodium, 39.15 gr.; bicarbonate of soda, 15.60 gr.; water, 16 oz. Dose, two ounces and upwards. It will be observed that the chloride of calcium is omitted, but the proportion is so small that even when it was included there was no difference in the action. This inexpensive mixture, made for a penny a quart, can be effectually recommended. It will be found to possess every advantage attributed to the natural variety, the necessity for buying which seems to be done away with.—[*Canadian Journal of Med. Science*.

PRACTICE OF MEDICINE.

VESICAL CALCULI WITH NUCLEI OF BONE.—In the *American Journal of the Medical Sciences* for Oct. 1880, Dr. J. M. Banister, Assistant Surgeon U. S. A., reported the successful removal of a calculus and necrosed bone by the operation of lateral lithotomy from the bladder of an Indian scout, nineteen months after the reception of a gun-shot wound. In the January number for 1882 of the same Journal, Dr. Banister describes the exceedingly interesting pathological specimens removed from the bladder after the death of the patient.

The calculi discovered in the vesical cavity proved of the greatest pathological interest. The larger of the two, evidently, from its shape and size, the one left encysted at the lithotomy in 1880, was ovoidal in shape and weighed 244 grains Troy; its surface was thickly coated with crystals of ammonio-magnesian phosphate. Upon sawing through this calculus, there was found a well-marked *splinter of bone playing the part of a nucleus*, while the mass of the stone was composed of phosphatic matter arranged in concentric layers. The smaller body, more irregular

in shape was also coated with crystals of ammonia-magnesian phosphate, and weighed 77½ grains Troy. Its mass was found to *consist chiefly of necrosed bone*, around which was its phosphatic envelope. It is probable that the nucleus of the larger stone had the following origin. The wounded anterior wall of the bladder having, in consequence of the inflammatory process, become adherent to the injured pubic bone, a splinter, chipped or possibly exfoliated from the bone in question, remained in the wound and served as a nucleus for the phosphatic deposit. This stone had evidently been liberated from its sac by the ulcerative process, and had dropped into the bladder fundus some months before the patient's death.

In the case of the smaller formation, the origin of the nucleus cannot be so definitely traced. It could not possibly have remained in the cavity of the bladder at the conclusion of the lithotomy *a year before*, as every precaution was then taken to avoid such an oversight, and at the time of the patient's departure from the hospital he was suffering from no symptom referable to such a cause. It is very probable, therefore, that, like the bone fragments removed at the lithotomy, it made its way into the bladder by ulcerative absorption, having in the first instance been splintered from the sacrum and driven by the force of the ball into the bladder-wall; that it was not a *recent exfoliation* was proved by the absence of signs of present necrosis affecting the pelvic bones, as discovered at the *autopsy*, and by the non existence of fistulous tracks.

This case is the fourth instance of calculous formation about bone fragments in cases of gunshot wound of the bladder reported in the United States; while only sixteen cases are on record in the surgical histories of all countries.

OBSTETRICS AND GYNECOLOGY.

CASE OF TUBULAR PREGNANCY.—About the middle of July last I was requested to see Mrs. C., about 11 p. m. She had been in her usual health, and had walked to a friend's house in the town leaving there about 9 p. m. with her husband. She had not gone more than a couple of hundred yards when she complained of great faintness and pain in the abdomen. Being quite unable to go farther, she was taken into the house of an acquaintance, and was put to bed. As she was retching violently, she had been given some brandy before I saw her. On arrival at the house I

found that she had eaten a very hearty tea of celery and cold meat, and I was inclined to think it was a case of flatulent colic. *She had not, however, seen any menstrual fluid for ten weeks*, and at this time a slight sign was noticed. I examined the areolæ round the nipples, and concluded she was pregnant. I prescribed an opiate, and did not anticipate anything serious. She slept at intervals during the night, and only occasionally complained of pain, but in the morning she became worse, and her friends sent for me at 8 a. m. On getting there I found her dying, and I remained till she died, a period of about a quarter of an hour. I did not feel justified in certifying to the cause of death without a post-mortem examination, and an inquest was held on the case. On opening the abdomen a very large quantity blood was found —I should say about eight pounds weight—entirely filling the cavity. Beliving that she was pregnant I removed the blood from the addomen and examined the pelvic organs, and on the right Fallopian tube, near its opening into the uterus, I discovered a round cyst of about the diameter of a sixpence, which had ruptured, the impregnated ovum having escaped into the abdomen. Hæmorrhage occurred from the point of rupture, and consequent death. The uterus was quite healthy, but just about twice the size of the virgin uterus, and weighed about three ounces. I have never seen such a well-marked case of tubular fœtation, and the danger in these cases must be very great, when, as at this early period, the Fallopian tube burst from over distension. I think the fatal results of this case may be considered as strong argument in favor of operation, when a diagnosis has been made out. In this case no diagnosis had been asked for, and I doubt the possibility of it having been successfully arrived at, had I attempted it.—[Dr. J. G. Davidson in *Australasian Medical Gazette.*

A SUCCESSFUL CASE OF HYSTERECTOMY.—Dr. Goodell had a patient, a mulatto of thirty-five, who had cystic degenerations of each ovary. The pelvic and intestinal adhesions were of the most formidable character, making in themselves a long and a bloody operation. But in addition to these complications, each ovary was so incorporated with the womb that he was obliged to remove that organ. This he did by dissecting off the bladder, by applying the wire clamp at a point midway between the os externum and the os interum, and by transfixing the stump with

two pins. Strange as it may seem, on the fourth and fifth days quite a smart menstrual flux—or, rather, a metrostaxis—took place from this small cervical fragment. The clamp fell off on the fourteenth day, leaving a very large and deep funnel-shaped opening, which is rapidly filling up. It is now three weeks since the operation, and the patient is convalescent. He stated that ovarian tumors are rare in the colored race, this being the second case only which he had seen. On the other hand, fibroids of the womb and fibro cystic tumors are more common with them than with the white race.—[*Medical Times.*

DISEASES OF CHILDREN.

INWARD FITS IN CHILDREN.—Dr. Charles Bell writes on this subject, in the Edinburgh *Medical Journal*, December 1881:

This is a common disease in infants within a few months after their birth. The child lies as if asleep, but the eyelids are partially open and have a twinkling motion, the eyes are turned up so as to show the white, the muscles of the face and lips have a tremulous movement, producing the effect as if the child were smiling—a circumstance which has given rise to the beautiful idea that angels are whispering to it, which has been finely illustrated by Moore in his Irish Melodies, under the name of "The Angel's Whisper." As the disease increases the breathing is occasionally interrupted, the features become pinched, and a livid circle forms around the mouth and eyes. There is restlessness and starting during sleep, and the child is disturbed by the slightest noise, and sighs and brings up wind, after which it relapses into a drowsy state. In simple and mild cases the attacks generally disappear as the child's strength improves; but if it is improperly treated, the drowsy state increases, and a sort of thrush appears, accompanied by feverishness, sour vomiting, watery stools, grips, which may terminate in regular convulsions.

Dr. Armstrong has divided this disease into four stages, viz.: 1st, inward fits; 2nd, fever and thrush; 3rd, sour vomiting; 4th, convulsions. Underwood did not consider it worthy of being called a disease, and that he knew no complaint which ought to be called "*inward fits*;" the symptoms described above were worthy of attention only from the risk that they might pass insidiously into regular convulsions—an amply sufficient reason

for their being carefully attended to and means taken for their being removed.

The incipient stage which occasioned the name may occur at very early periods, and the earlier it does so, there is the greater danger to be apprehended. Nurses often use the terms on insufficient grounds, and in consequence the mother is apt to become needlessly alarmed, and to have recourse to very improper medicines, such as Dalby's carminative, Godfrey's drops, Soot drops, etc., which are liable to produce serious results.

It has been connected with spasm of glottis, with acute asthma, the peculiar species of convulsions, cerebral croup, laryngitis stridulus, thymus, asthma, or spasmodic croup by different authors.

TREATMENT.—It is clear that the symptoms which have just been described are the result of something irritating the bowels, and th aa dose of magnesia will in general be sufficient to remove it. Should this not be the case, it may be necessary to attend to the state of health of the nurse, and to give the child the benefit of change of air.—[*Canada Med. Record.*

FŒTAL CIRCULATION.—Dr. W. F. Glenn, in a paper on the above subject in the *Southern Practitioner*, comes to the following conclusions:

1. That the fœtus is entirely supported by arterial blood carried by the umbilical vein from the placenta, and that blood is mixed with venous blood in the inferior venā cava before circulating through the system.

2. That the blood from the left ventricle is distributed through the entire aorta and its branches in exactly the same manner as in the adult.

3. That the ductus arteriosus, acts as a conducting tube, directing the venous blood from the right ventricle into the descending aorta, in order that it may reach the placenta through the branches of the internal iliacs, known as the umbilical or hypogastric arteries.

4. That the reason the head and upper extremities are better developed at birth than the lower, is because they have a better supply of arterial blood. The reason they have a better supply is because the blood that goes to the head is only diluted with

that of the inferior vena cava, while that which goes to the lower extremities is additionally diluted by mingling with the venous blood from the right ventricle, through the ductus arterious.

It is not a larger amotnt going to the upper than the lower extremities; but that which does go, is of a better quality.

DEFECTIVE HEARING IN CHILDREN.—Dr. Weil, of Stuttgart, has during the last years examined 4,500 school children in reference to their hearing. The examination, which included boys and girls of all social classes, yielded the following results: (1) A normal ear can in a quiet neighborhood hear whispering of ordinary fondness at a distance of twenty to twenty-five metres; (2) defects of hearing are exceedingly common—in the public schools 30 per cent of the children were found to have imperfect hearing in one ear, while a still larger percentage were found not normal; (3) among the children of well-to-do parents the figures are more favorable than among those of the poor; (4) the percentage of defective hearing increases with age; (5) country schools yield relatively better results than city schools. Most of those whose hearing had been found abnormal had never been subjected to any treatment, and many had no suspicion even of their failing, just as in cases of color-blindness. Not a few of these children had been considered and treated as "inattentive," and justice demands that in the future every "inattentive" child be examined with reference to its ears.—[*Vienna Neue Freie Presse.*

MENTAL AND NERVOUS DISEASES.

CEREBRAL PATHOLOGY.—The latest general pathological proposition relating to the encephalon have been given by Seguin, as follows:

1. Lesions of the basis cerebri, especially if involving the pons varolii and crura, give rise to the following symptoms: Paralysis, anesthesia in the face and limbs, impairment of equilibrium, changes within the eyes; no psychical symptoms.

2. Lesions of the great basal ganglia probably produce no symptoms unless encroached upon by the internal capsule which passes near them.

3. Lesions of the white center of the hemispheres produce no symptoms when they do not involve the parts composing the

internal capsule. If the anterior portion of this capsule be injured, we observe paralysis; if its posterior part, anesthesia.

4. Lesions of the cortex cerebri produce, when located anteriorly, psychical symptoms; when located in the median regions, paralysis of an imperfect kind; and when situated posteriorly, no symptoms at all.

5. Lesions of the cerebellum produce no symptoms except by involving adjacent parts containing important motor and sensory tracts, thus giving rise to irregular paralysis, change in optic apparatus, symptoms of irritation of the vagus nerve, etc.

6. Lesions of one half of any part of the encephalon produce motor and sensory symptoms in the side of the body opposite to the lesion. When the lesion is in one half of the basis cerebri some symptoms are found in the side of the face and head corresponding to the lesion, others in the opposite half of the body.

7. Lesions in the median line cause symptoms to appear in both sides of the body.

8. Any intra-cranial lesion which acts in such a way as to increase the intra-cranial pressure may produce, in addition to other symptoms, the condition known as choked disk or neuro-retinitis.—[*Louisville Medical News.*

THE EYES IN INSANITY.—A truce to the nonsence, written and talked, about the "appearance of the eyes" as an indication of insanity. Excluding certain peculiarities with reference to the relative size of the pupils and the mobility of the irides, which, albeit they are not in the least degree understood even by the most erudite of experts, are commonly spoken of as pathognomonic sings of mental disease, there are *no* appearances of the eyes worthy of a moment's serious consideration in the diagnosis of insanity. The "wildness," "unnatural brightness," "restlessness," "dulness," "vacancy", etc., which are so frequently mentioned in certificates of insanity, are utterly valueless as evidence of mental unsoundness. If the Commissioners in Lunacy were not either experts—in asylum practice—or lawyers, we should find the majority of certificates in lunacy rejected on the ground of their utter worthlessness. There is incomparably more restlessness, vacuity, and the like in the eyes of the sane than in those of the insane. Ophthalmic investigation may be expedient, and, under certain morbid conditions of the brain, the deep structures of the eye may—though we cannot say must—

furnish indications of disease. The pupils also may be affected; and in obedience to the laws of blood-pressure, the eyeball may be turgid or flaccid, or it may, of course, be compressed or allowed to fall loose, and become more or less modified in its form by any morbid or disorderly action of the muscles that surround it when the patient is insane, but the conditions favoring these "appearances" are identical in the mentally diseased and the mentally sound. Speaking generally, the expression, not of the eyes alone or particularly, but of the face as a whole is apt to be misleading in insanity. When a settled or formulated expression has become fixed or habitual, the case has reached a point of development, or exhibits other symptoms, which render the mere "appearance of the eyes" of little or no moment in the diagnosis; whereas, at the outset, when the discrimination is difficult, this so-called appearance is more likely to lead the observer astray than to enable him to judge the state fairly. We are strongly of opinion that the evidence of "the eyes" should be excluded from certificates, and disregarded by those who have to determine the existence or non-existence of insanity. The clinical investigation of mental disease is just as precise and elaborate a process as the clinical examination of a case of physical disease. The scientific medical psychologist does not ask a few capricious questions, and either guess the state of the cerebrum or arrive at the truth by some intuitive genius. If he is what he professes to be, he tests each function of the brain separately, trying it by definitive tests and standards, and thus ascertains the condition of the organ as a whole. If science has not placed the brain on a footing with the liver and the kidneys as regards the study of its functions, it has done nothing. It is important that this should be clearly recognized. In a word, psychology is *physiology*, so far as the physician is concerned; and no man can be anything else than a charlatan in mental practice unless he is a physiologist.—[*Lancet.*

CEPHALIC GALVANIZATION FOR EPILEPSY.—After ten years of satisfactory trial, we can speak with some confidence of the value of cephalic galvanization as an efficient auxiliary in securing permanently curative results in the treatment of many of these cases.

It may be regarded as claiming too much, but the statement is verified by experience, to say that fully one-half of our cases

including epileptoid disease and traumatic epilepsia, have apparently recovered after eighteen months of electric treatment, conjoined with the bromides, Fowler's solution, and sometimes chloral hydrate. Strychnia, nitrite of amyl and nitro-glycerine have in some cases been superadded for special indications. Twelve cells of an ordinary constant current portable battery—the Galvano Faradic Company's, or McIntosh—for five minutes every alternate day are sufficient to tranquilize the cerebral cells, and so impress the cervical sympathetic as to aid in bringing about that stability within the brain which makes the discharging lesion an impossibility in curable cases. Sponge electrodes should always be used, and a painless, unirritating, steady current employed. Of the remaining half of our cases, the paroxysms in very many have been kept in permanent abeyance by this means, and all have been more or less benefited. We are at a loss to understand why any author pronounces epileptoid more difficult to subdue than epilepsia. We have not found the fomer less manageable.—[*Alienist and Neurologist.*

SURGERY.

EUCALYPTOL IN WOUNDS.—The use of eucalyptol as a dressing for amputations, or any contused or lacerated wound cannot be too highly commended. That its efficacy in separating dead from living tissues, cannot be excelled, or its power to lessen suppuration exceeded, is a fact that its use will demonstrate to all. It is decidedly the best dressing for recent wounds that I have ever tried, and its results in a case of railroad accident, which recently came under my care, fully bear me out in that opinion I expressed, that the local use of eucalyptol in contused wounds can not be too forcibly dwelt on. In this case the right arm, the left leg, and removal of all the toes except the great one, of the right foot, together with a compound dislocation of two fingers of the left hand besides several minor wounds, occurring in an old gentleman of seventy-four years of age, afforded ample field to test its qualites as a local application. He is fully recovered and able to move as well as his maimed condition will permit, and what is left of him, is in sound bodily health. —[E. Batwell in *Detroit Clinic.*

SPONGE GRAFTING.—Such is the name applied by Mr. D. J.

Hamilton, to a method of filling a vacuity with a prepared antiseptic sponge, which becomes organized, through its similarity to the growing tissue, and aids materially in the process of filling up a vacant part, as after excision of a tumor, etc. There is considerable novelty in this suggestion, and it may prove to have wide applications in the surgery of the future. Mr. Hamilton has a paper of thirty pages, with numerous illustrations, on this topic, in the Edinburgh *Medical Journal*, for November, at the conclusion of which he says:—

So far as I see at preasent, the method of "sponge-grafting" seems excellently suited for growing new tissue where that is insufficient to cover a part or to allow of stretching, but whether it may not have a wider range of application remains for future experience to demonstrate. The only objection I perceive to its application is the somewhat long time required to organize it. During the first ten days I found that a part of a sponge placed in the abdomen had organized from an eighth to a quarter of an inch, but it always happens that one part organizes quicker than another, and hence, although in a large wound one part may throughly organize in, say a month, other parts of the same sponge require longer. I cannot see, however, what objection there would be to the patient going about if this were practicable, after the sponge had once become fixed. On the contrary, I should think that this might actually, in certain cases, exert a beneficial influence upon the organizing powers of the tissue. —[*Medical and Surgical Reporter.*

THE ART AND MYSTERY OF "BONE-SETTING".—The only mystery about that vaunted success of bone-setters lies in their boldness, an audacity bred of ignorance. Knowing nothing of the risks attending the violent jerking of dislocated limbs back into their sockets with the tearing away of adhesion and the rupture of tissue, they apply force in a degree and with a directness which few scientific surgeons would dare to employ. In a considerable proportion of cases no evil consequences may ensue, and the violence of the unskilled is rewarded. It is, however, scarcely fair to call these persons unskilled. There is a rude art about their proceedings. It consists in acquiring by manipulative investigation a knowledge of the way joints work under natural conditions, and by inference how they may be put out of gear. In this rough knowlege, which is of a sort with that

which the able-bodied seamen possesses in regard to ropes, sails, and rigging of his ship, the successful bone-setter is generally expert. He knows no more of the vital mechanism of the human body than the sailor knows of navigation; and though he may be able to haul and jerk, he cannot either know what he does or determine when and how force may be safely applied or would prove dangerous. It is strange that the intelligent community should trust their limbs—and lives to bone-setters. Nothing but blindness to the ignorance of those they employ can explain the fact that they frequently do so. It is desirable that the facts with regard to the sort of success bone-setters sometimes achieve should be clearly understood. It is the success of the man who by a lucky jerk of the wrist may chance to pull out a tooth which a skilled dentist would scarcely dare to attempt to draw. That blacksmiths can and do extract teeth, and bone-setters can and do reduce dislocations which surgeons have not had the hardihood to tear away from their false positions and force back into their sockets, no one can deny; but that these feats are accomplished by dint of a daring which comes of ignorance should be generally understood.—[*London Lancet.*

SIMULTANEOUS LIGATION OF THE CAROTID AND SUBCLAVIAN ARTERIES FOR ANEURISM OF THE INNOMINATE.—In the *American Journal of the Medical Sciences* for July, 1880, Dr. Lewis A. Stimson, of New York, published the account of an operation performed for the relief of a patient affected with an aneurism of the innominate artery. The operation consisted in the simultaneous ligation of the common carotid and of the subclavian in its third portion, and was followed by the gradual subsidence of the tumor and the relief of the symptoms. It remained afterward unchanged up to the time of the patient's death from phthisis, twenty-one months after the operation, and Dr. Stimson now completes the history of his case by publishing in the January number for 1882 the account of the post-mortem appearances.

The aneurism arose from the anterior and right half of the innominate artery, involving nearly its entire length; it began just above the origin and extended nearly to the spur of the bifurcation. There was a second small shallow aneurism in the tracheal side of the innominate about an inch in diameter, and half an inch in height; this also was filled by a firm clot. The

clots of these two pouches were in contact with each other by their bases. They were laminated in structure, closely adherent to the wall of the sac, and covered on their free surface by a membrane that was structurally continuous with the wall of the artery, so that the blood could not make its way at any point between the clot and the wall of the sac. The aneurism, or the artery, was pervious to the extent that blood could probably pass in a small stream between the contiguous bases of the two clots. The carotid artery was completely occluded from its origin to its bifurcation by a pale adherent clot, which was also overgrown by a membrane at the origin of the vessel and at the bifurcation. The place where the ligature (catgut) had been applied, one inch below the bifurcation, could be recognized by the touch as a transverse sulcus when the vessel was rolled between the fingers. There was no change at this point in the size of the artery. There was communication between the external and internal carotids at the bifurcation. The subclavian artery was pervious in its first and second portions; its branches not recognizably dilated. It was entirely obliterated for a distance of half an inch in its third portion, its lumen was of full size on each side, the obliteration ending abruptly in a smooth, rounded pouch. Apparently the artery had been completely divided by the ligature and its ends had separated by retraction. There was no clot on either side of the occluded part. The common carotid was permanently occluded at the bifurcation by a white glistening membrane uniform in appearance and continuous with the inner coat of the artery.

PATHOLOGY.

PATHOLOGY OF HYDROPHOBIA—At a recent meeting of the Microscopical Section of the Manchester Medical Society, reported in the *British Medical Journal*, Mr. E. H. Howlett exhibited some sections of the spinal cord from a case of hydrophobia. After briefly alluding to a series of cases of hydrophobia, in which four out of five persons bitten by the same rabid dog, had died with well marked symptoms, he proceeded to discuss the pathology of the disease by stating that, for a long time, the virus had been known to exist in the saliva of rabid animals. Microscopical examination of saliva would naturally demonstrate the presence of numerous organisms, but such a result was to be expected even in the saliva of healthy individuals. With the

view of ascertaining whether any particular form of disease could be discovered in the salivary glands themselves or in the blood, the following experiment was performed. Within an hour and a half of death, portions of the submaxilary, parotid, and sublingual glands, with Stenon's duct, were dropped into test-tubes containing a fine turnip infusion; also the same organs were placed in some dry test-tubes, and the whole series placed in an incubator, where they were kept for several weeks. These test-tubes were exhibited to the Society (eight months after the commencement of the experiment), and it was seen that the solutions remained perfectly bright and clear; and, of the dry preparations, with the exception of the one containing parotid gland, no change beyond the drying up of the tissue ocurred. From these results, it was concluded that no organism existed in the salivary glands or blood in hydrophobia which was capable of causing any form of fermentative change. Microscopical examinations of the other organs failed to demonstrate the presence of any micro-organism.—[*Medical and Surgical Reporter.*

A TERATOLOGICAL CURIOSITY.—Acording to the *Presse Médical Belge*, two united children have been recently exhibited at Vienna which surpass in interest the celebrated Siamese twins. They were born in 1877 at Lacona in the province of Turin. They have each a well-formed head, and perfect arms, and a separate thorax with perfect internal viscera. At the six rib, however, they unite, and there is but one abdomen, one anus, one right and one left leg. There is a penis and corresponding scrotum, but behind the latter there is a rudimentary male organ, by which a few dorps of urine escape. From behind, two vertebral columns are seen, two sacrums, and three buttocks, the central one evidently being due to the fusion of two, and in it is a rudimentary anus. The true anus serves for both children. Each individual has power over the corresponding leg and not over the other; thus the right leg obeys the will of the right twin named Baptiste, the left that of the other twin named Jacob. Walking is therefore impossible, although the legs are strong. Each child is said to possess a distinct moral personality. Sometimes one is laughing when the other is crying; one may sleep while the other is awake. Usually the head and face of each is inclined laterally, but if one is held perpendicularly the other

becomes almost horizontal. The condition of sensation in the legs is not stated in the account.—[*London Lancet.*

THE ARTIFICAL PRODUCTION OF ORGANIC FORMS.—The mimicry of organic forms by inorganic elements has often excited the attention of the curious, and it has been recently systematically studied, so far as chemical elements are concerned, by MM. Monnier and Vogt. Forms which closely resemble those of living organism, such as simple and tubercular cells, with septa and granular contents, may be artificially produced in a suitable liquid by the union of two salts, which form, by double decomposition, one or two insoluble compounds. One of the salts must be dissolved in the liquid, the other solid. These objects are formed equally well, whether one of the liquids is of organic origin (as sucrate of lime) or purely inorganic (as of silicate of soda). The resulting form clearly depends on the nature and viscid consistence and concentration of the liquids. Some viscid solutions, however, such as gum arabic and chloride of zinc, do not give rise to them. The form which results is as constant for the same condition as is the crystalline form of a mineral, and it may even be employed as a means of ascertaining the presence of a given substance. It promises to constitute a new and very sensitive form of analysis, and may thus be employed, for instance, to distinguish the alkaline carbonates, sesquicarbonates, and bicarbonates, the one from the other. The chief influence which determines the form, is the nature of the acid which enters into the composition of the solid salt. The sulphates and phosphates, under certain circumstances, give rise to tubular forms, the carbonates to simple cells. With certain exceptions, such as the sulphates of copper, cadmium, of nickel, and of zinc, these pseudo-organic forms are only produced by the combination of those substances which are found in real organisms. Sucrate of lime, for instance, give rise to such forms, while sucrate of strontia and of baryta do not. The pseudo-organic elements are surrounded by true membranes of perfect dialyzing power, allowing only liquids to pass. Their contents are heterogenous, and granules in the interior may be disposed in a special manner. They thus resemble absolutely the morphological elements of organized beings. It is highly probable that the inorganic constituents of living protoplasm play some part in deter-

mining the forms which the organized elements assume.—[*London Lancet.*

DERMATOLOGY.

THE SMALL PUSTULAR SCROFULODERM.—In the *American Journal of the Medical Sciences* for January, 1882, Prof. Louis A. Duhring describes, under the above title, a rare and hitherto undescribed form of disease, which is characterized by marked and well-defined lesions, of obstinate and chronic course, and always tending to terminate in scarring. Dr. Duhring describes the eruption, which has many points resembling the syphilodermata, but which must be viewed as a manifestation of scrofulosis, as follows: It consists in the formation of pin-head and small split-pea sized, disseminated, yellowish, flat pustules, with usually a raised violaceous areola. In general appearance the lesions resemble those of the small pusular syphiloderm. They crust over gradually in the course of from one to several weeks, with depressed, shrunken, hard or horney, yellowish or greyish, adherent crusts, which in time drop off, leaving marked, punched-out looking, indelible scars, resembling those of variola. The lesions are further characterized by a sluggish, chronic course, and may last weeks or months. They appear at irregular periods, new ones coming out as the older ones disappear, so that the patient is rarely free from them. The disease may continue for years. It may occur upon any region, but it generally shows a disposition to appear about the face and on the extremities. Other symptoms of scrofulosis are generally present. Dr. Duhring reports three cases of the disease, and discusses the treatment which he has found to be most successful.

XANTHELASMA MULTIPLEX.—Dr. S. MacKenzie (British Medical Journal, January 21, 1882) has recently reported two cases of this rare disease. The patients were brothers, aged forty-four and forty-six years. The disease in these cases was congenital; probably the cases were in this respect unique. A sister and paternal grandfather had suffered from it. The disease presented the appearance of tubercles arranged in linear fashion, having a yellow wash-leathery look and being especially well marked about the neck and axillæ. There was no palpebral change. According to Duhring (Diseases of the Skin) the eyelids are, as a rule, the first portion of the body affected. There

was no disease of any other organ. In this respect these cases agree with those reported by White, Fox, Carry and Duhring. The history of the patient's ancestry other than dermatologically could not be obtained.—[*Chicago Medical Review.*

ON PSORIASIS FROM BORAX.—Dr. Gowers calls attention (*Lancet*) to the fact that psoriasis may result from the internal administration of borax. He met with the characteristic eruption in obstinate cases of epilepsy, treated with borax after the bromide, had failed. The eruption occurred on the trunk, arms and legs but more on the arms than elsewhere. The face was free. It was located on both the flexor and extensor surfaces. The patches varied in size up to an inch and a half in diameter. This appearance was quite characteristic, but the scales were not so thick as they sometimes are in ordinary psoriasis. The affection was amenable to treatment by arsenic.—[*Practitioner.*

CONIUM BATHS IN ECZEMA.—Two cases of eczema were treated (*Lancet*) by conium baths in the Royal Infirmary at Glasgow, under Prof. Charteris, with the most excellent results. In the first case—a young man, aged twenty—the affection had lasted for eight months, the legs and arms were covered with an angry, red eczematous rash. The itching was intense, and various local applications which were used failed in any way to relieve it. A month after admission two handfuls of conium leaves were placed in a tepid bath, and the patient was ordered to lie in this for twenty minutes. The result was satisfactory. The same night the patient slept well. The baths were continued for a week, and at the expiration of that time scales began to form, and the iching entirely disappeared. In another week he was dismissed with his skin healed. In the second case the eczema was of three weeks' duration. The redness on the arms and legs was very marked, and the itching was described by the patient as being intolerable. He was immediately ordered a bath similar to the one previously mentioned. It was continued for a week, and the man was dismissed completely cured in fourteen days. He complained on two occasions of a numb feeling, followed by tingling, after having had the baths. In giving the conium baths it is advisable to cover the bath with oiled silk, leaving the head bare. In this way there is no risk of headache from the inhalation of conium vapor.—[*Practitioner.*

OPHTHALMOLOGY.

ON OPHTHALMIA NEONOTORUM AND ITS PREVENTION.—Dr. Karl Grossman points out that the ophthalmia neonatorum may affect the eyes of a child born of a mother who has a vaginal discharge, not necessarily of the purulent character belonging to gonorrhœa or fluor albus. It seems, therefore, that before and during birth the secretions often acquire a character quite as infectious as that of gonorrhœal discharge, though they appear in no way different from the physiological discharge of the mucous membrane. He therefore directs that every child, without exception, whether of a healthy mother or of a mother suffering from leucorrhœa, should have the closed eyelids washed and cleaned outside with a two per cent. lotion of carbolic acid as soon after birth as possible. When this has been carefully done, the eyelids must be inverted to complete ectropion, with exposure of the conjunctiva tarsi. Then, after carefully removing every trace of flaky secretion which may be found there, the conjunctiva must be inundated with the two per cent. carbolic lotion for one or two minutes, care being taken that the lotion reaches every part of the conjunctival sac. This proceeding ought to be repeated thrice a day during the first two days of life. If the catarrh in the vagina of the mother has been very severe, a pad soaked in the carbolic acid should be applied to the eyes of the child in the intervals between the application of the lotion, and renewed every half hour during the daytime.—[*Practitioner.*

Reports on Recent Progress in Medicine.

Article XLVIII.

Report on Obstetrics. By R. W. Wilcox, M. D.

Antiseptic Midwifery.—Although the source of decomposition is beyond the reach of injections as ordinarily practiced, yet the following precautions are here observed: The hands of those in attendance are to be washed thoroughly, the use of a nail brush being insisted upon, and the soap used is *sapo viridis* with a two-per cent. solution of carbolic acid. Further, after each examination and before proceeding to the next, the hands must be cleaned in a one-fifth of one per cent. solution of permanganate of potash, and then in a ten per cent. (about) solution of hydrochloric acid, until they become again normal in color.

Instead of oil or soap for examination purposes, a two per cent. solution of carbolic acid in glycerine, is used. After obstetric operations it is customary to wash out the uterine cavity with a solution of thymol in water, one-tenth of one per cent. which is done with a glass fountain syringe and the vaginal nozzle. After an ordinary labor, the genitals are cleansed with either the thymol solution above mentioned, a two per cent. carbolic solution or one of salicylic acid, one-fifth of one per cent. It is intended that no one that is operating on a cadaver or doing pathological work shall do obstetrical operations.

The Operation of Turning.—The practical instruction given here is so precise that it seems worth repeating. The choice of the hand to be used is much insisted on, namely: when the occiput is on the left half of the pelvis, the right hand is to be used, and, *vice versa*. When, however, the position is transverse with the abdomen forward, the same rule applies to the choice of the hand but the woman is no longer to be put in the dorsal position, but in, if for instance, the head is left, to be placed on her right side with the nates brought to the left side of the bed; thus are the feet as easily seized as in the other positions. The foot, when seized, is to be held thus: the ankle lies between

the index and middle fingers of the operator's hand while the thumb is firmly placed in the arch of the foot. Traction is then made in the proper line, and the lower leg is to be taken in the other hand, the fingers evenly encircling it and the thumb being laid on the superior surface of the leg, care being taken that the thumb shall not meet the fingers, as that would involve the liability to fracture. Then the upper leg is grasped in the same way by the hand that formerly held the foot. When the other leg and pelvis is born, traction is continued by placing the tips of all four fingers on the crests of the iliac bones, the thumbs lying easily on the nates. The abdomen is not touched to avoid setting up prematurely respiration. When the birth has progressed to the shoulders, then the ankles are seized together in such a way that the feet lie in the ring formed by the meeting of the index finger and the thumb, while the little finger lies between the legs. Thus having a firm hold on the child, it is carried to the mother's left or right thigh according as the child's corresponding shoulder is at the perineum. The arm is then delivered according to the usual rules, wrapped to the body with a towel and after the child is carried to the other side and held by the other hand, the remaining arm is liberated. Then, of course, follows the delivery of the head which may be done by forceps, the "Prague manœuvre," or any of its modifications. In the latter case, the fingers of the dorsal lying hand of the operator must not be so far extended that by their pressure the clavicle is broken. Only the points concerning this operation have been given, in which stress is not laid in the teaching of the American schools.

PLACENTA PRÆVIA.—A case occurred here, of which the usual symptoms were present. The treatment of the case differed so much from that laid down in most English text-books, that it will be briefly stated. At the first hæmorrhage, which was also the beginning of labor, the urine was drawn and a colpeurynter placed in position and inflated. Thus the os was allowed to dilate, the pulse being carefully watched, which would indicate internal hæmorrhage, while external hæmorrhage would be impossible. When the os was fully dilated, the patient was narcotized, the hand of the operator inserted into the os and it was found that the insertion was marginal. The portion presenting was "peeled" off and folded back in the vagina, the operation of

turning was done and the patient left for a half hour to nature. There was no danger of hæmorrhage, as the detached portion of the placenta was under sufficient pressure from the presenting point. When the body was born the head was delivered in the usual manner and the placenta then was expressed, no hæmorrhage. The child was fully developed but dead, it appeared very anæmic. The placenta showed that an area nearly as large as the palm of a man's hand had been detached by the operation. The mother had no untoward symptoms after the birth. This plan of treatment, in comparison with other methods as found in the text books, such as rupturing the membranes and then tampon or total detachment of the placenta, seems rational.

THE RUBBER COVERED FORCEPS.—The forceps used are of the Brown-Simpson pattern, and are completely covered with hard, black rubber. This gives the instrument a clumsy appearance, and in some cases the increased thickness of the blades might be objected to. But the ease with which thorough disinfection can be made and thorough cleanliness attained, together with the fact that the physician in private practice is freed from the necessity of constantly polishing his instruments more than counter-balances the objections. The increase in cost is but little when compared with the saving of time and patience.

Vienna, Oct. 1881.

Book Reviews.

Article XLIX.

☞Notice.—In order to secure reviews of books it will be necessary to send duplicate copies of the same. Authors sending reprints will please remit them in triplicate in order to obtain notice in this department. In all cases, where *single* copies of books or pamphlets are sent, a mere acknowledgement of their receipt only will be made

Library of Medical Classics:

No. 1. A Practical Manual on the Treatment of Diseases of the Rectum. By Henry Smith, F. R. C. S. First American from the Fourth English Edition. 8vo. pp. 44. (New York: Bermingham & Co. Sept. 1, 1881.) price 25 cents.

No. 2. Clinical Lectures on Diseases of Women, delivered in St. Bartholomew's Hospital. By J. Matthews Duncan, M. D., LL. D., F. R. S. E., etc. 8vo. pp. 67. (New York: Bermingham & Co. Sept. 15, 1881.) price 35 cents.

No. 3. A Manual of Venereal Diseases, for Students and Practitioners, being a concise description of these affections and of their treatment. By Berkeley Hill and Authur Cooper. Second Edition. 8vo. pp. 25. (New York: Bermingham & Co. Oct. 1, 1881.) price 20 cents.

No. 4. Indigestion & Biliousness. By J. Milner Fothergill, M. D. 8vo. pp. 89. (New York: Bermingham & Co. Oct. 15, 1881.) price 35 cents.

The publishers of this series have brought upon themselves somewhat of the odium of medical book publishers, on account of this extremely cheap edition of English Classics. The books in pamphlet form are given at almost a nominal price, and though lacking in beauty of binding and typography, furnish the medical reader with the best of pabulum at such a cost that there is no excuse left for ignorance.

The treatise on the treatment of diseases of the rectum, by Henry Smith, has long been favorably known to the profession and can be read with interest and profit.

Duncan's Lectures on Diseases of Women, needs no commendatory words from us. There is not a gynæcologist pretending

to that name, who has not read and re-read this work. The absurdly low price at which we find it here offered, places it within the reach of all.

Hill and Cooper's manual is a very short one. In fact, it is a condensation of their work and only the essential parts are given. It is a resumé of the most current ideas on the subjects as entertained by the dualistic shool of Syphilographers.

Indigestion and Biliousness, by Fothergill has been so well spoken of and has been so heartily recommended to the profession, time and again, that the mere mention of the name is a sufficient guarantee of its worth. This work, unabridged, is offered for thirty-five cents, a price which seems absurdly out of keeping with the real importance of the work.

That there are many disadvantages connected with the publication of such cheap editions is patent to all; but, on the other hand, it makes it an easy matter financially, to acquire a great deal of valuable reading of the best kind and when indulged in, can not fail to stimulate the mind to keep up this indulgence in the best medical literature. The publishers need only take care not to introduce, in their series, books whose standard is not up to the mark, or which have sunk into a deserved oblivion.

A PRACTICAL TREATISE ON HERNIA. By JOSEPH H. WARREN, M. D. Second and Revised Edition, fully Illustrated. 8vo. pp. 428. (Boston: Jas. R. Osgood & Co. London: Sampson, Low, Marston, Searle & Rivington. 1882.)

This second edition is larger than the first and gotten up in much better shape. Six new chapters have been added and the introduction in the first edition has been omitted. The appendix, for which there was little necessity, has also been judiciously omitted. The chapters which have been added are Chap. I., Causation of Hernia; Chap. X., Recent Operations for Hernia; Chap. XI., Artificial Anus and Wounds of the Intestines; Chap. XIII., Hydrocele and Varicocele; Chap. XIV., Observations on Hernia; and Chap. XV., Résumé and Clinical Reports.

Quite a number of engravings and three heliotypes have been added, the latter reproductions from Bourgery and Blandin.

As we remarked in the review of the former edition, this book is a pretty clear and short éxposé of hernia and its treatment with a special reference to Heaton's method as modified by Author. This method has received notice everywhere by the medical press and has attracted attention wherever it has been mentioned. The author, however, in our opinion, lays too much stress on the many advantages of his pet theory and operation and would perhaps advocate it too warmly. That it will find a fitting and appropriate place in operative surgery we do not at all doubt.

A NEW FORM OF NERVOUS DISEASE, together with an Essay on Erythroxylon Coca. By W. S. SEARLE, A. M., M. D. 12 mo. pp. 138. (New York: Ford, Howard & Hulbert, 1881.)

These are two essays read by the author before the Medico-Chirurgical Society of New York, and which were subsequently published in a New York Medical Journal in 1879 and 1880. The author claims to have discovered a new form of nervous disease, and this claim was immediately repudiated by many eminent neurologists. Charcot to whom the author referred the matter, confessed that he had not only never met with it, but had never seen a mention of it accompanied by such characteristics as mentioned by the author.

The author gives a narrative of cases followed by the etiology, analysis of symptoms, pathology, prognosis and diagnosis of the affection. Differential diagnosis and different treatments are given with a synopsis of the results of treatment.

It cannot fail to interest the specialist, although not of so much value to the general practitioner. Dr. Searle thinks that he has fully sustained his position a question that will be definitely determined at some future time, by those most competent to do so. If he is sustained, we will have, no doubt, some incomprehensibly difficult name to characterize this new ill.

The essay on eryrhroxylon coca is shorter than the preceding one and includes a general description, botanical description, chemical analysis and its physiological effects. This is rather a compilation of data and experiments, than a memoir and as the knowledge of this plant is yet imperfect, it is not to be expected that the essay can be satisfactory. The importance, however, that coca has assumed, on account of its value in the treatment of meconism entitles it to the fullest consideration and anything written upon it must possess some interest.

A MANUAL OF PRACTICAL HISTOLOGY. By T. MITCHELL PRUDDEN, M. D. 12mo. pp. 265. (New York: G. P. Putnam's Sons, 1881. St. Louis: Hugh R. Hildreth Printing Co.)

The author has employed this text-book for several years in histological laboratory and has endeavored to condense a few of the many points connected with normal histology. It is a manual to be used with the microscope and is intended for use by classes having teachers. For each subject he gives a short, general description and then follows this with a "practical study." In fact, this little work holds the same relation to the study of normal histology that a dissector does to anatomy.

In the introduction are given the various simple means of making histological preparations, such as a student may be

expected to make and to understand. At the end of the book are placed a number of blank pages, wherein are to be delineated the forms of the tissues as seen by the microscope. This is a valuable hint to those studying the subject, as it enables them through practice, to acquire enough dexterity with the pencil to copy with a certain degree of accuracy, and without the intervention of another party, such objects as may prove useful or interesting. Besides, it serves to awaken a method of examining more minutely and conscientiously specimens whether normal or pathological which cannot fail to make careful and interested investigators and physicians.

ANATOMICAL STUDIES UPON BRAINS OF CRIMINALS. A Contribution to Anthropology, Medicine, Jurisprudence and Psychology. By MORITZ BENEDIKT. Translated from the German. By E. S. FOWLER, M. D. 8vo. pp. 185. (New York: Wm. Wood & Co. 1881. St. Louis: St. Louis Book & News Co.)

Prof. Benedikt has, in this monograph, made a most important and interesting contribution to anthropology. That his views are by no means established, and that the purely somatic view he seems inclined to take in regard to crime is not acquiesced in by leading psychologists, he himself acknowledges. This essay was intended rather as an incentive to further research in the direction pointed out by him, than as a dogmatic assertion of his personal views.

The number of his observations is much too limited to draw any legitimate conclusions therefrom; even the general one, which he enunciates on page 157: "The brains of criminals exhibit a deviation from the normal type, and criminals are to be viewed as an anthropological variety of their species, at least among the cultured races." As he himself says, such a doctrine would be calculated to create a revolution in ethics, psychology, jurisprudence and in those things pertaining to the criminal classes.

The author makes a comparison between the brains of animals and those human beings of depraved type, but his whole line of reasoning is *à priori*.

The book is, on the whole, very readable and is only marred by the very poorly executed engravings which find place in its pages.

A HAND-BOOK OF VERTEBRATE DISSECTION. By H. NEWELL MARTIN, D. Sc., M. D., M. A., and WILLIAM A. MOALE, M. D. Part I. How to dissect a Chelonian. 12mo. pp. 94. (New York: MacMillan & Co. 1881. St. Louis: Hugh R. Hildreth Printing Co.) price 75 cents.

For the comparative anatomist this little book is one that is invaluable, as it deals with a subject that has hitherto received but little attention. The red-bellied slider terrapin is the "subject" treated of, but in such a manner that the attentive reader is enabled, after its attentive perusal, to dissect systematically and intelligently any chelonian.

The author intends issuing other pamphlets containing directions for the dissection of a pigeon and a rat and also a lizaad, a bony and a cartilagious fish. All of these animals are very useful and interesting on account of the promising physiological experiments which may be gotten out of them. On this account, it is necessary that there should be no waste in dissecting. Besides, it engenders a habit of careful investigation and also renders work much more systematic.

The present monograph is clearly and distinctly written and forms an excellent manual for use in the laboratory, for which it is intended.

The index is full and of great use for reference. The typographical work is good.

ECZEMA AND ITS MANAGEMENT. A Practical Treatise based on the study of Two Thousand Five-Hundred Cases of the Disease. By L. DUNCAN BULKLEY, A. M., M. D. 8vo. pp. 344. (New York: G. P. Putnam's Sons. London: J. & A. Churchill, 1881. St. Louis: Hugh R. Hildreth Printing Co.)

This is one of the most important works connected with dermatology, that has appeared during 1881, from the fact that it is written for the general practitioner and not for the specialist. Although not quite as voluminous as the importance of the subject would seem to demand, it is yet so handled as to give the intelligent reader a good insight into the mysteries of this common and intractable disease. Eczema may, by a persistent study be recognized and when it is mastered, the study of dermatology may be considered as but a step more in advance, as eczema has been aptly termed the "key to dermatology."

Dr. Bulkley has also largely insisted upon the constitutional treatment of eczema which has not been accorded the full importance which it deserves.

The whole work is rather a narrative of the author's personal experience, than a treatise; but the well-known ability and thoroughness of the writer are such as to make it none the less authoritative on that account. We do not doubt that there will be a call for a new edition at an early date.

ENCYCLOPŒDIA OF THE PRACTICE OF MEDICINE. Edited by Dr. H. VON ZIEMSSEN. Vol. XX. General Index. 8vo. pp. 499. (New York: William Wood & Co. 1881. St. Louis: Hugh R. Hildreth Printing Co.)

Finis coronat opus; this is the last volume of one of the best series on medicine ever published, and the publishers as well as the editor are to be congratulated upon having brought to a successful termination such a valuable work.

The volume before us is not very interesting unless in connection with the other volumes. It is embellished with a fine frontispiece—a faithful portrait of Prof. von Ziemssen, the editor.

Books and Pamphlets Received.

ARTICLE L.

The International Encyclopœdia of Surgery. A Systematic Treatise on the Theory and Practice of Surgery, by authors of various nations. Edited by John Ashhurst, Jr., M. D. Illustrated with chromo-lithographs and wood-cuts. In six volumes. Vol. I., 8vo. pp. 717. (New York: Wm. Wood & Co., 1881. St. Louis: Hugh R. Hildreth Printing Co.)

Marriage and Parentage and the Sanitary and Physiological Laws for the Production of Children of Finer Health and Greater Ability. By a Physician and Sanitarian. 12mo. pp. 185. (New York: M. L. Holbrook & Co., 1882.)

A study of the Tumors of the Bladder, with Original Contributions and Drawings. By Alex W. Stein, M. D., 8vo., pp. 94. (New York: Wm. Wood & Co., 1881.)

The Sympathetic Diseases of the Eye. By Ludwig Mauthner, M. D. Translated from the German, by Warren Webster, M. D., and James Spalding, M. D., 12mo., pp 220. (New York: Wm. Wood & Co., 1881. St. Louis: Hugh R. Hildreth Printing Co.)

Frozen Sections of a Child. By Thomas Dwight, M. D. Fifteen Drawings from Nature. By H. P. Quincy, M. D. 4to., pp. 66. (New York: Wm. Wood & Co. St. Louis: Hugh R. Hildreth Printing Co.)

A Treatise on the Diseases of the Eye. By Henry D. Noyes, A. M., M. D. 8vo., pp. 360. (New York: Wm. Wood & Co., 1881. St. Louis: Hugh R. Hildreth, Printing Co.) Dec. No. Wood's Library of Standard Medical Authors.

A Manual of Organic Materia Medica. Being a Guide to Materia Medica of the Vegetable and Animal Kingdoms. For the use of Students, Druggists, Pharmacists and Physicians. By John M. Maisch, Phar. D., with many illustrations on wood. 12mo., pp. 459 (Phila.: Henry C. Lea's Son & Co., 1882. St. Louis: Hugh R. Hildreth Printing Co.)

Suppression of Urine. Clinical Descriptions and Analysis of Symptoms. By E. P. Fowler, M. D. Ninety-Three Clinical Cases, with Illustrations, Tables and Diagrams. Paper pre-

sented to the New York Medico-Chirurgical Society, Dec. 14, 1880. 8vo., pp. 86. (New York: Wm. Wood & Co., 1881. St. Louis: Hugh R. Hildreth Printing Co.)

Diseases of Women: including their Pathology, Causation, Symptoms, Diagnosis and Treatment. A Manual for Students and Practitioners. By Arthur W. Edis, M. D., London, F. R. C. P., M. R. C. S. With one hundred and fifty-eight illustrations. 8vo., pp. 576. (Phila.: Henry C. Lea's Son & Co., 1882. St. Louis: Hugh R. Hildreth Printing Co.)

Lectures on Electricity, (Dynamic and Franklinic) in its Relation to Medicine and Surgery. By A. D. Rockwell, A. M., M. D. 8vo., pp. 122. (New York: Wm. Wood & Co., 1881. St. Louis: Hugh R. Hildreth Printing Co.)

Nervous Diseases: their Description and Treatment. A Manual for Students and Practitioners of Medicine. By Allan McLane Hamilton, M. D. Second Edition Revised and Enlarged with seventy-two illustrations. 8vo. pp. 598. (Phila.: Henry C. Lea's Son & Co., 1881. St Louis: Hugh R. Hildreth Printing Co.)

Memoranda of Physiology. By Henry Ashby, A. M., M. D., (London). Third Edition thoroughly Revised, with Additions and Corrections by an American Editor. 32mo. pp. 319. (New York: Wm. Wood & Co., 1882.)

A Treatise on Human Physiology; designed for the use of Students and Practitioners of Medicine. By John C. Dalton, M. D. Seventh Edition, with two hundred and fifty-two illustrations. 8vo., pp. 722. (Phila.: Henry C. Lea's Son & Co., 1882. St. Louis: Hugh R. Hildreth Printing Co.)

Transactions of the Medical Society of the State of New York, for the year 1881. 8vo. pp. 495. (Published by the Society, 1881. Tuar, Smith & Bruce, Printers, Syracuse, N. Y.)

Transactions of the Twenty-Eighth Annual Meeting of the Medical Society of the State of North Carolina, held at Ashville, N. C., May 31, 1881. 8vo. pp., 128. (Wilmington, N. C.: Jackson & Bell, Printers, 1881.)

Home and Climatic Treatment of Pulmonary Consumption, on the Basis of Modern Therapeutics. By J. Hilgard Tyndall, M. D. 12mo., pp. 174. (New York: Bermingham & Co., 1882.) Price 50 cents.

Illustrations of Dissections in a Series of Original Colored Plates the size of Life, Representing the Dissection of the Human Body. By George Viner Ellis and G. H. Ford, Esq. The Drawings are from Nature, by Mr. Ford, from Dissections

by Prof. Ellis, reduced on a uniform scale, and reproduced in facsimile expressly for Wood's Library of Standard Authors Vol. II., Second Edition, 8vo., pp. 206, Plates LVIII. (New York. Wm. Wood & Co., 1882.) Feb. No. Library of Standard Medical Authors.

Opium-Smoking in America and China. A study of its prevalence and effects, immediate and remote, on the individual and the nation. By H. H. Kane, M. D. 24mo., pp. 156. (New York: G. P. Putnam's Sons, 1882. St. Louis, Hugh R. Hildreth Printing Co.) Price $1.00.

Transactions of the American Ophthalmological Society. Seventeenth Annual Meeting, Newport, 1881. 12mo., pp. 317. (New York: Published for the Society, 1881.)

Questions submitted to the Graduating Classes of The Medical College of Ohio, from 1871 to the Present Time. (Cincinnati: Murry & Co., 1881.) Price 35 cents.

The Trance State of Inebriety: its Medico-Legal Relations. By T. D. Crothers, M. D., with an Introduction on the Nature and Character of the Trance State. By Geo. M. Beard, M. D. (A Paper read before the New York Medico-Legal Society, Nov. 2. 1881.)

The Fourth Annual Report of the Presbyterian Eye and Ear Charity Hospital, for the year ending Dec. 1, 1881. (Baltimore: Hugh S. Owen, Printer, 1882.)

An Aid to the Mechanical Treatment of Weak Ankles and Inverted Feet. By Charles F. Stillmann, M. D. (Reprinted from the *Medical Record*, Sept 17, 1881.)

News Items.

Article LI.

Well Grown.—The Medical Society of the County of New York has over eight hundred members.

Sigismund reports a case in which a small splinter of wood remained in the eye for forty-seven years without any disturbance.

Nephrectomy.—Thus far 54 operations have given 26 successes—28 failures. The lumbar incision gives better results than that in the linea alba.

Expert Fee.—An Ohio judge refused to compel the medical witness to express his opinion as to the cause of death unless he received the fee of an expert.—[*Med. Journal.*

Dr. Isaac I. Hayes, the Arctic explorer and surgeon of Dr. Kane's expedition (second Grinnell), died in New York, from heart disease, Dec. 17, 1881

Texas voted to locate the medical department of her State University at Galveston. Austin gets the literary part of the institution.

Professor Charcot has been recently transferred, at his own request, from the chair of pathological anatamy to a prosessor ship of nervous diseases recently established by the Faculty of Medicine at Paris.

Dr. J. E. Tefft, of Springfield, Mo., gave the Journal office a call on his way back home. He has just delivered a course of lectures at the Missouri State University, on Genito-Urinary Diseases, and Methods of Diagnosis for Stone in the Bladder.

The *British Medical Journal* reports an ear of corn discharged through the chest. The assailant must have used a cannon, or at least, a pistol with an abnormally large meatus. But the " friend

at our elbow" suggests that our British cousins (or grandparents) say corn when they intend *wheat*; and that the patient fired his own charge, after having thus loaded himself to the muzzle. —[*Atlanta Medical Register.*

POPULARIZING MEDICINE.—The *Family Doctor* is the name of a new publication which, though "edited by a phyiscian," it is difficult to regard as anything else than a journalistic error. The plan of popularizing medicine is a serious mistake, and any medical information, of a desirable or necessary kind for general use, can only rightly be such as to find admission to the pages of hygienic jounals and health reviews.—[*Med. Press and Circular.*

VIVISECTION received a most powerful defence in the December number of the *Nineteenth Century.* Sir James Paget, Dr. Wilkes, and Professor Owen argue for liberty in scientific research. The absurdity of the English law is well illustrated by a statement of Sir James Paget. He says: "I may pay a rat-catcher to destroy all the rats in my house with any poison he pleases, but I may not myself, unless with a license from the Home Secretary, poison them with snake-poison."

THE Medical Society of the County of Kings has adopted the following resolutions:

Whereas the journal known as the *Index Medicus*, has proved itself to be a work of the highest value to the general profession of medicine, and

Whereas, Its discontinuance, which is impending by reason of deficient support by subscription, would be felt as a loss especially by the scholarly part of medical labor, therefore be it

Resolved, That it is respectfully suggested to the State Medical Society that that Society devote annually the sum of fifty dollars as its contribution to the maintainance of the *Index Medicus.*

We hope to see many more do the same to encourage so useful and elaborate a publication as the *Index Medicus.*

MATERNAL IMPRESSIONS.—The following occured in the practice of a Maryland physician, according to the *Dublin Medical Journal*: "A lady during pregnancy carried with her a pocket edition of Moore's poetical works, which she read almost constantly. Her child, at three years of age, exhibited a most wonderful gift of putting sentences into rhyme; in fact, naturally

expressed his little ideas and thoughts in flowing measure!" Blame not the bard—but a case like this shows how important is a well assorted library to a gravid uterus.—[*British Med. Journal.*

We hope that this item will be soon cremated.

We are pleased to learn that a new Medical and Dental Directory for this city (selected) is being gotten up by Mr. C. A. Kendrick, of Cincinnati, which will prove of the greatest value to all those who have any business to transact with the reputable physicians and dentists of the city. It is in the form of a map in which can be seen at a glance the name, office, residence, office hours and telephone connections of any one. The directory will be placed in all the hotels, drug-stores, charitable and public institutions of the city, each subscriber also receiving a copy.

Besides this a list of professional nurses, medical publications and other matters of interest to the medical profession will be added as new features.

The name and address of any reputable physician will be taken by the publisher and placed on his directory at a merely nominal rate.

The enterprise has been highly praised and recommended in other cities and it cannot fail to give satisfaction to its patrons.

WE HAVE RECEIVED the following from Dr. W. H. Robinson, Secretary of the Clay County Mo., Medical Society, with a request that it be inserted in the JOURNAL:

Liberty Mo., January 10th, 1882.

At a regular meeting of the Clay County Medical Society, held in Liberty, Clay County, Mo., on January 10th 1882, the following preamble and resolutions were unanimously adopted:

Whereas, There appeared in the December number of the *Medical Herald* of Louisville Ky., an article which purports to be a review of the address of the President of the "State Medical Association of Missouri" at its 24th annual meeting, held at Mexico Missouri and,

Whereas, The so-called reviewer, in fact does not review the paper at all, but makes an unwarrented attack upon the scholarship of the author without pointing out its defects and,

Whereas, The said reviewer, or some one connected with the

journal in which his article appeared, has sent copies of the same to a number of physicians throughout our County and State and,

Whereas, The author of said address,—Dr. J. M. Allen—is a member of this society, and a laborious, earnest and honored member of the profession, therefore be it

Resolved, That we, the members of the Clay County Medical Society, brand the so-called reviewer as a *calumniator* and *totally unworthy* the honorable position of a reviewer for a medical journal.

E. H. Miller President,

W. H. Robinson Secretary.

A Spanish Medical Congress will be held at Seville, April 9, 1882. Preparations have been made on a large scale for the successful carrying out of the meeting. The programme of subjects proposed for discussion includes: the relations of animal heat to the nervous system; urea; illuminating apparatus; tuberculosis; infant mortality; prevention of scrofula; action of common air as a medicine; heat as a medicine; diabetes; antiseptic treatment; color-blindness; strabismus; and a number of other topics under almost all of the different specialties.—[*Med. Record.*

BISMARK AS A PATIENT.—The Prince's chief trouble, as is well known, is sciatica, and it is greatly dreaded on account of its obstinacy. Besides this, the Chancellor suffers at times from an inflammatory swelling of the veins in the feet, and, like all other mortals, occasionally from lighter indispositions—colds and indigestion. It seems that the patient is as inconsistent regarding the methods of his treatment as he is in other matters. With the same feeling of "absolute indifference" which according to his own words, he manifests in certain political topics, he also deals with the exigencies of the medical science. Homœopathy or allopathy—it is all one to him, so long as he believes one or the other will cure him. It has even happened that he allowed himself to be treated by an allopathic physician, and soon after by a homœopathist. When at Friedrichsruh, he sends for Privy Sanitary Councillor Dr. Dohn, of Hamburg, who is an allopath. At Varzin, when medical attendance is needed, the physician, also an allopath, in the adjacent town of Schlawe,

is applied to. When at Kissengen, the Prince consults the well-known Dr. Diruf, also an adherent of the old school. During his stay at Berlin, however, he inclines to homœopathic treatment.—[*American Register.*

A CURIOUS MISUSE OF TERMS.—A correspondent from Appleton, Wis., sends us the following amusing and suggestive note: "The vast amount of medical knowledge unexpectedly displayed by the non-professional press during the illness of the late President is now to a great extent a matter of record. As evidence of the singular accuracy of much of this knoweldge, I offer the following statements, all of which were taken from the columns of leading daily papers of several large cities: 'Hyparenthesis' was feared, as also was 'hypodralic congestion.' Among the glands affected during the course of the case were the 'salwary conglomerated,' the sympathotic,' the 'partoid,' 'parotidid,' 'paratodit,' one of which, it was feared, would 'sulphurote,' while in the case of another, 'supperation' was the expected catastrophe. There were also 'metastalic abcesses,' and others which were 'metallastic' in character, and the 'plexus cosiacus' played an important part, which was also true of 'septicemid' and 'septicemæmia,' 'sceptic matter' was treated by the use of 'permanganesed potash' and 'permanganose potash,' while the vital powers were sustained by the use of 'reptonized enemetics,' and 'liquor nourishment.' Finally, Dr. Bliss gave a reporter his personal assurance that 'President Garfield had not been under the influence of optics for more than a week.'"—[*Medical Record.*

MUSIC AS MEDICINE.—Much has been said upon the power of music to effect most beneficial results upon the afflicted, both in mind and body; and there can be little doubt that a very great deal still remains to be done when the subject shall have been more thoroughly investigated by the medical profession, and certain rules laid down for the treatment of such cases as would be likely to yield to its influences. We have recently heard of a doctor who, finding his patient in a state of confirmed *melancolia*, managed to induce her to try over some of the music for which she had an especial fondness in former years, and thus not only restored her temporarily to comparative cheerfulness, but by prescribing a repetition of this medicine, and seeing that she obeyed his directions, at each of his visits, managed, in an almost

incredible short time, to effect a permanent cure. Of course, in this case, and in all others of which we have hitherto heard, the remedy acts indirectly upon the nervous system, and almost unconsciously the patient is relieved. But we now find that the curative process is more directly applied. M. Vigouroux, a French surgeon, it is said, has obtained the mitigation of pain by administering a recurrent series of sound-waves, by means of a tuning fork and sounding board to the affected part. Upon this method M. Bondet has devised an important improvement. A tuning-fork is keep in constant vibrations by means of an electro-magnet, and the undulations are communicated to the skin by means of a rod. Neuralgia is thus removed in a few minutes, and anæstheic effects are produced by a longer action. We are glad to find that this important matter has now assumed so practical a form, and look forward with much interest to the records of its future divelopment.—[*London Musical Times.*

TRAINING PEOPLE TO MEET MEDICAL OR SURGICAL EMERGENCIES.—The State Charities Aid Association proposes to establish a kind of ambulance school for the instruction of police and firemen, general workmen, and railroad employés, and the employés of all public institution and others who may wish it, how to meet emergencies. The plan is modelled after that of a London society, which has been able to drill many thousands, so that they are now able to supply the place of the physician or surgeon until that important functionary can be summoned and arrive. Lectures will be given weekly. After the lectures examinations will take place, and certificates will be given to such as show themselves possessed of the knowledge that will fit them for this laudable work. In addition to these lectures it is also purposed to give lectures touching important matters relative to maternal duties and home hygiene to women.—[*Medical Record.*

MISSOURI SOCIETIES.—Medical Association of the State of Missouri.—President, Dr. W. P. King; Vice-Presidents, Drs. B. J. Milam, A. E. Gore, G. Hurt, E. A. Waggoner, B. F. Wilson; Recording Secretaries, Drs. C. A. Todd, St. Louis, J. H. Duncan; Corresponding Secretary, Dr. Wm. Dickinson, St. Louis; Treasurer, Dr. C. A. Thompson, Jefferson City.

Standing Committees.—Of Arrangements, Drs. C. L. Lamb, E. C. Hays, J. L. Gleason, J. C. Hearne, B. G. Dysart; On Cre-

dentials, J. F. Hanna, Wesley Humphrey, W. J. Yates; On Scientific Communications, Drs. E. J. Warth, A. W. McAlester, S. M. Dodson; On Progress of Medicine, Drs. H. H. Middlekamp, Pinckney French, S. S. Todd, C. A. Thompson; sub-com. on Children's Diseases, J. P. Kingsley; sub-com. on Diseases of the Mind and Nervous System, Dr. C. H. Hughes; On Progress of Surgery, Drs. T. F. Prewitt, F. J. Lutz, H. H. Mudd, J. Geiger, J. D. Smith; sub-com. on Orthopœdic Surgery, Dr. A. J. Steele; sub-com. on R. R. Surgery, Drs. J. W. Trader, J. C. Hearne; On Medical Education, Drs. J. E. Posey, J. E. Teed, W. J. Heddens; On Medical Ethics, Drs. E. W. Schauffler, C. L. Hall, G. O. Feagans; On Publication, Drs. E. M. Nelson, W. C. Glasgow, C. H. Hughes.

Special Committees.—On Organization of Local Medical Societies, Drs. T. J. Norris, W. A. Monroe, T. P. Rothwell; On State Medicine and Medical Legislation, Drs. E. A. Donelan, Garland Hurt, R. E. Young, J. M. Allen, J. W. Brent.

The next meeting will be held at Hannibal, Tuesday May, 16, 1882.

Jno. McDowell Medical Society. This society will meet on the fourth Wednesday in every month, at the office of Drs. Brent & Marsh, Tipton, Mo.

Papers will be read, cases reported and subjects discussed at each meeting.

All members of the medical profession are cordially invited to attend. Jno. W. Marsh, M. D., Secretary.

The Barton Medical Association meets monthly, at Lamar, Mo.

The names of its officers for the coming year are as follows: J. W. Dunn, M. D., President; A. A. Dye, M. D., Vice President; T. H. Jones, M. D., Secretary; J. W. Speece, M. D., Treas.

The St. Louis Medical Society. Organized 1835, incorporated 1837. Meets regularly every Saturday night in Polytechnic Building, except summer months. Membership 208. First Saturday in January is the annual meeting. Transactions taken by the JOURNAL's stenographic reporter, and published in its official organ, the ST. LOUIS MEDICAL AND SURGICAL JOURNAL. President, Wm. Dickinson, M. D.; Secretary, A. H. Ohmann-Dumesnil, M. D.

Members of the profession visiting the city are cordially invited to attend. Corner of 7th and Chestnut Streets; First Floor.

St. Louis Medico-Chirurgical Society, 55 members.

St. Louis Obstetrical Society meets once each month. 20 members.

Monroe County Medical Society, 24 members.

Kansas City District Medical Association, 65 members.

Kansas City Medical Society, 22 members.

Shelby County Medical Association, 16 members.

Grand River Medical Society.—Composed of the physicians in good professional standing, living in the counties of Livingston, Grundy, Daviess, Caldwell, Harrison, Carroll, Mercer and Linn. 88 members. Meets first Tuesday in June and December. President, Dr. E. A. Waggener, Carrollton; First Vice President, Dr. F. M. Davis, Livingston Mo.; Second Vice President, Dr. Tinsley Brown, Hamilton; Secretary and Treasurer, Dr. A. L. McClark, Carrollton; Assistant Secretary, Dr. G. H. Highsmith.

Carroll County Medical Society.—Meets in Carrollton, Mo. on the second Tuesday of every month. Dr. A. Austin, Presidenl; Dr. H. Beal, Vice President; Dr. W. A. Full, Secretary.

The Linton District Medical So iety.—This Society meets in Mexico, Mo., every three months. 62 members, 5 Honorary members.

The Southeast Missouri Medical Association.—Meets semi-annually. 40 members.

The Southwest Medical Association.—Meets twice each year. The next place of meeting is in Springfield, Mo., in June, 1882. 47 members.

District Medical Society of Northwest Missouri. 72 members.

Lathrop Medical Society meets on the first Tuesday of each month at Lathrop, Clinton Co. President, Dr. O. D. Fitzgerald; Secretary, Dr. W. J. Bever.

The Twelfth Congressional District Medical Society meets annually. The next meeting will be held at Glenwood, Schuy-

ler Co. in the early part of May, 1882. President, Dr. J. D. Smith; Secretary, Dr. W. F. Morrow.

Clay County Medical Society meets at Liberty, Clay Co. Secretary, Dr. W. H. Robinson.

We would be much obliged to the recording secretaries of the following societies, if they would send the JOURNAL the correct name of their society, and others that they know of; also, their officers, number of members, dates and places of meeting, papers that are to be read and all other items connected with the societies that may be of interest. The announcement of each meeting should be sent in at least one month in advance. For all such news we shall be much obliged.

Moberly District Medical Association.

Montgomery County Medical Society.

Saline " " "

Macon " " "

Boone " " "

Hannibal " " "

Howard " " "

Marion " " and Surgical Association.

Lewis County Medical Association.

Chariton " " Society,

Lafayette " " "

ILLINOIS SOCIETIES.—Illinois State Society.—Organized June 4, 1850. Next meeting at Quincy in May, 1882. 362 members.

The Chicago Medical Society.—Organized April 5th, 1852, as the Cook County Medical Society. In 1858 the name was changed to the Chicago Medical Society. The meetings are held the first and third Mondays of every month, at 8 o'clock, P. M., and, at the present time, at the Washington Home, corner of Madison street and Ogden Avenue. 138 members.

Chicago Society of Physicians and Surgeons.—Organized April 22d, 1872. The meetings are held at the rooms of the Library of the Medical Press Association, 188 Clark street, the second and fourth Mondays of every month, at 8 P. M.—that of

the second Monday in May being the annual meeting. 87 members.

Central Illinois Medical Society.—Organized May, 1872. Meets the first Tuesday in May and November. Place not fixed. 55 members.

Æsculapian Society of the Wabash Valley.—Organized in 1846. The members reside principally in the counties of Clarke, Cumberland, Coles, Edgar, Moultrie, Douglass, Champaign and Vermillion, Ill., Vigo and Vermillion counties, in Indiana. Meets semi-annually the last Wednesday in May; annually, the third Wednesday in November. Place of meeting variable. 75 members.

Decatur Medical Society.—Organized May 28th, 1874. Meets the fourth Thursday of each month, at Decatur. 18 members.

District Medical Society of Central Illinois.—Organized April 28th, 1874. Meets last Tuesdays in April and October, at Pana. 62 members.

Jersey County Medical Society.—Meets first Tuesday in each month. 22 members.

Madison County Medical Society.—Meets semi-annually. Next meeting at Edwardsville. 32 members.

Military Tract Medical Association.—Includes the counties of Bureau, Stark, Henry, Mercer, Knox, Warren and Henderson. Meets semi-annually, at Galesburg, second Tuesdays in January and July. 61 members.

Society of Macoupin County for Medical Improvement.—Organized September 16th, 1873. Meets on third Tuesdays of January, April, July and October. Place of meeting, variable. 33 members.

Tri-State Medical Society of Illinois Indiana and Kentucky, organized in 1874. Meets annually. Next meeting to be held at Terre Haute, Ind. in Sept. 1882. President, Dr. J. M. Halloway, Louisville, Ky.; Vice Presidents, Dr. Arch, Dixon, Henderson, Ky., Dr. T. D. Washburn, Hillsboro, Ill., Dr. J. C. Beaaer, Vincennes, Ind., Dr. S. Williams, Cincinnati, O., Dr. Edw. Borck, St. Louis. Secretary, Dr. G. W. Burton, Mitchell, Ind. Treasurer, Dr. F. W. Beard, Vincennes, Ind.

Southern Illinois Medical Association.—Organized at Jonesboro, January 2d, 1875. Meets the third Wednesdays of January and June. 103 members.

Iowa and Illinois Central District Medical Association.—Organized in 1866. Meets on second Thursdays of January, April, July and October, alternately in Davenport and Rock Island. 48 members.

IOWA SOCIETIES.—Iowa State Medical Society, organized in 1852. Meets annually; next meeting at Des Moines, Jan. 25 1882. J. F. Konnedy, M. D., President; T. J. Caldwell, M. D., Secretary.

DAKOTA SOCIETIES.—Black Hills Medical Society. This society meets in Lead City, Dakota Ter. Dr. Joel Houghton, President; Dr. O. B. Thompson, Vice President; Dr. B. B. Kieth, Secretary; Dr. Jeff. O. Neal, Corresponding Secretary; Dr. W. S. Dyer, Treasurer; Drs. D. K. Dickinson, A. S. Williams and M. L. Dyre, Curators. The meeings take place once each month.

METEOROLOGICAL OBSERVATIONS.

By A. WISLIZENUS, M. D.

The following observations of daily temperature in St. Louis are made with a MAXIMUM and MINIMUM thermometer (of Green, N. Y.). The daily minimum occurs generally in night, the maximum at p. m. The monthly mean of the daily minima and maxima added and divided by two, gives quite a reliable mean of the monthly temperature.

THERMOMETER, FAHRENHEIT—JAN., 1882.

Day of Month.	Minimum.	Maximum.	Day of Month	Minimum.	Maximum.
1	9.0	22.0	18	13.5	29.0
2	17.5	30.0	19	25.0	31 0
3	22.0	33.0	20	28.0	38.5
4	30.0	34.0	21	33.5	44 0
5	23.5	30.0	22	20.5	31.0
6	29.0	39.0	23	24.5	34.0
7	35.0	56.0	24	25.0	40.0
8	40.0	42.5	25	36.0	49.0
9	31.5	41.5	26	48.0	64.5
10	34.0	37.0	27	30.5	39.0
11	35.5	39.0	28	31.0	40.5
12	31.0	36.5	29	13.5	34.0
13	35.5	45.0	30	20.5	30.5
14	27.0	37.0	31	26.0	34.5
15	35.0	54.0			
16	17.0	30.5	Means	27.0	37.2
17	8.5	18.5	Monthly Mean.	32 1	

Quantity of rain and snow, 2.87 inches.

MORTALITY REPORT.---CITY OF ST. LOUIS.

FROM DEC. 8, 1881, TO JAN. 28, 1882, INCLUSIVE.

Small Pox..... 5	Childbirth..... 6	Convulsions & Trismus Neonatorum 80	Syphilis.....
Scarlatina. 32	Inanition, Want of Breast Milk, etc. 13	Hydrocephalus and Tub. Meningitis. 9	Apoplexy 16
Pyæmia & Septicæ10	Alcoholism.. 6	Meningitis & Encephalitis 27	Dis. fem. gen. org. 3
Erysipelas 5	Rheumat'm & Gout 1	Other Diseases of the Brain and Nervous System52	Surgical Operation 1
Diphtheria 47	Cancer and Malignant Tumor..... 30	Cirrhosis of Liver and Hepatitis...17	Execution..... 5
Membran's Croup.19	Phthisis & Tuberculosis, Pulmon 163	Enteritis, Gastro-Enteritis, Peritonit, and Gastritis' 37	Deaths by Suicide 7
Whooping Cough. 3	Bronchitis.. 74	Bright's Disease and Nephritis...27	Deaths by Accid't 30
Ovarian tumor.... 0	Senility 30	Other Diseases of Urin ary Organs. 7	Deaths by Homicid 2
Measles 1	Pneumonia.....100	Diabetes..... ... 0	Congen Defor'ty 3
Typhoid Fever....42	Heart Diseases... 49		Total Deaths from all Causes.... 1208
Cerebro Spinal Fev14	Other Diseases of Respir'y Organs 48		Total Zymotic Diseases 303
Remittent, Intermittent, Typho-Malarial, Congestive & Simple	Skin Disease..... 1		Total Constitutional Diseases.....247
Contin'd Fevers,48	Marasmus—Tabes Mesenterica and Scrofula..... 31		Total Local Diseases 537
Puerperal Fevers..12	Other Const. Dis. 18		Total Develop'tal Diseases 75
Diarrhœal Disea's 38			Deaths by Viol'ce45
Other Zymotic Diseases..... 6			

CHAS. W. FRANCIS, *Health Commissioner.*

Vol. XLII. APRIL, 1882. No. 4

Original Contributions.

Article LII.

Treatment of Opium Poisoning.* By Darwin H. Bliss, M. D., of Kansas City Mo.

I have only a brief paper to furnish to-day, and in it will confine myself as closely as possible to cases occurring under my personal observation, and I have chosen to consider the Treatment of Opium Poisoning with three consecutive cases in as many months.

Opium smoking or the opium habit will not be herein considered, as they present an extensive field in themselves individually, and the busy practitioner is seldom called to such cases in emergencies. I hope to present to you some interesting points in the treatment of poisoning by opium or morphine, whether accidental or with suicidal intent.

These cases above mentioned, occurred in infancy and childhood.

Symptoms are familiar to all of you and will not need to be gone over unnecessarily by me, in offering the principal points governing the cases to be considered.

Case I. On the 26th, of October, 1.30 A. M., I was hastily called to a case of opium poisoning; the patient, a child aged two years, had been given by mistake, two and one-half grains of morphine, the night previous at 8.30 P. M. The parents had called a physician as soon as they discovered their mistake, (by the difficult breathing of the child) which was about twenty minutes after the morphine had been given; and he, upon his arrival gave ten grains of sulphate of zinc, and soon left the house; giving no further directions, assuring the parents that if they could keep the child awake until two o'clock in the morning, it would recover. But the emetic given did not act, and after laboring with the little one for three or four hours without any improve-

* Read before the Jackson County Medical Society, Feb. 3d, 1882.

ment, they thought best to send for another physician; but physician number two did not feel anxious to take a case of this kind and referred the messenger to me, saying I had the necessary outfit, stomach pump etc., and would, he presumed, take the case.

When I was called at 1.30 A. M., being five and one-half hours after the ingestion of the poison, the case presented an extremely unfavorable prognosis, as the entire amount must by this time have been absorbed. Under these circumstances, I thought best not to use the stomach pump, nor repeat the emetic, as they would only further tend to depression of vitality, and this had already been put to trial by the severe treatment the friends and family had subjected the little one to, by forcibly dragging him about the house for several hours. Coma was so profound that cold water forcibly thrown into the face and on the back of the neck, produced little or no effect; and I directed the use of hot water applications at a temperature of 120° Fahrenheit, and directed the assistant to place the child in her lap and use friction and warm applications alternating occasionally with cold ones. The hot water applications had a much more salutary effect in producing reflex action than the cold.

Immediately upon learning the amount of poison taken, I gave $\frac{1}{80}$ grain atropia sulphate hypodermically. In one-half hour this dose was repeated by the mouth, although it was very difficult to get any substance into the stomach, as the powers of deglutition was very much impaired, and it was only by severe kneading of the external surface of the throat that it could be accomplished. In two hours from the time the second dose was given, I gave the third dose of $\frac{1}{80}$ grain atropia, hypodermically, and did not repeat this till four hours after the third dose was given, viz. at 8 o'clock on the morning after the drug was taken. In the meantime, from the very beginning, I found the most salutary effect in producing reflex action by giving from two to three drops of spirits of ammonia in one-half teaspoonful of brandy and water every half hour; this caused the patient to take deeper inspirations each time it was given.

The pupils were contracted to the calibre of a pin's head, and gave no response to light whatever. The abdomen had become enormously distended with gas crowding the organs of the thorax upward until it seemed as if the abdominal muscles must give way; and I was on the point of using the hypodermic needle to puncture with and permit the escape of gas in this way, but con-

cluded to give rectal injections of assafœtida a thorough trial first; and if this disagreeable remedy failed, I would resort to puncturing; but it did not fail entirely, for after several hours of its use, repeated frequently, at 8 o'clock A. M., the hour the fourth dose of atropia had been given, the eruption of gas from the bowels commenced, and the neighbors who up to this time had been doing all in their power to assist, suddenly became scarce, and claimed they had left some duty at home undone.

The peristaltic motion of the intestines had, previous to this been arrested by the large quantity of opium taken. Respirations at the beginning of treatment were reduced to six per minute and continued so. The pulse was not perceptible at the wrist. I was obliged to keep up artificial respiration the greater part of the time, fearing it would fail entirely, but placed most confidence in the virtue of atropia to counteract or neutralize the opium through the circulation, yet feared to give it in any larger doses, apprehending that in overdoses it would be more serious if possible than the present condition.

I continued the use of these means till 4 o'clock P. M. on the 27th, being twenty hours from the time the morphine was given, when I noticed the first sign of resuscitation and improvement. The little fellow partially opened his eyes and made an effort to cry, immediately closing them and becoming unconscious again. From this time on, I stopped the friction and warming process, and placed him on the bed. Reaction had at last set in and he would rouse up for a few seconds and again become unconscious; each time the intervals becoming shorter and the periods of consciousness more prolonged. No more medicine was given after this, but milk in teaspoonful doses every fifteen or twenty minutes, or as often as the patient wakened constituted all the nutriment necessary to properly support the system. At 8 o'clock P. M., four hours later, the temperature had increased and marked 101° F., and the skin had a dry though not very harsh feeling. This was only transitory, disappearing shortly.

The child rapidly improved from this time on, though I was very apprehensive some serious complication would be the result of the lungs having been so ingorged for this length of time, but happily nothing occurred to retard the speedy and perfect recovery except the soreness due to the use of severe manipulation and friction of the skin, and removal of portions of the epidermis.

Statistics show opiates to be much more fatal in children and

infants than other remedies in the same ratio. A babe one day old has died from the effects of one drop of laudanum, but in the adult one and one-fourth grains morphine has been given hypodermically, without causing death. On the other hand, Dr. Ludwig Franzler reports a case of almost fatal poisoning, in a man, from two drops of a one per cent. solution of atropine dropped in the eye.

In reviewing some of the most important factors in the case, it seems that more perseverance and patience in the medical attendant first called, would have prevented nearly all the severe symptoms that occurred, as he saw the child during the first hour, before the stomach could have become completely obtunded by the morphine; but one dose of sulphate of zinc was not sufficient. Had he given heaping teaspoonful doses of mustard flour in water repeated every fifteen minutes for three doses, if necessary, and then followed by large doses of sulphate of zinc, he would have completely emptied the stomach, and symptoms of collapse have been prevented. Perseverance on my part, after the elapse of five hours, would not have met with success had it not been for the use of atropia in liberal doses and the use of ammonia, which in my estimation is even more valuable in producing reflex action (if judiciously used) than atropia, but is not in any other way, to any extent, antidotal in opium poisoning. It is, so far as I have learned, original with me, never having heard of its being used in these cases. It more than met my expectations and left no lesions due to its irritating qualities.

Atropia in doses of $\frac{1}{120}$ grain in adults will have a decided influence on the capillaries, but in this case a child of two years, no visible reaction took place till after the fourth dose of $\frac{1}{30}$ grain, showing the antagonism exerted by the remaining forces of the opium.

Case II. I was called at 1.15 A. M. This patient was a girl eight years of age; had been under the care of a homœopathic physician for treatment of intermittent fever. I found notable depression, contraction of pupils, stertorous breathing, very feeble pulse and difficulty in swallowing. There was no certainty in this case as to the amount or exact nature of poison taken. A positive diagnosis from the poisoning alone is often impossible. In some cases of congestion of the brain or of uræmia, the phenomena are identical with those of opium poisoning. The homœopath was called to explain himself in the case, but at first

denied having given opiates, though upon further developments acknowledged he had mixed morphine in the powders left for the child; he said he gave it to produce a good night's rest. I got possession of one of the powders and made an analysis of a part of it a few days later, and found it to contain morphia sulphate and cypripedin, the active principle of lady-slipper.

The symptoms were not so severe as in case No. 1 and the distention from the formation of gas was not very marked. The same plan of treatment was adopted in this case, but it only required two doses of atropia, with the use of ammonia to produce the necessary reaction. In about twelve hours the dangerous symptoms had passed away and a prompt recovery resulted.

Electricity was used in both of these cases, but it did not produce any deeper respirations nor stimulate the action of circulation; only producing the spasmodic twitching of the muscles common to action of the current in the recently dead subject and was suspended.

In Case III. one third of a grain of morphine was given by the nurse. The amount was left for the mother to control the pain in rheumatism from which she was suffering at the time. This occured in an infant only six weeks old, and but little could be done that would be of service; although I kept up artificial respiration for six hours and think even this case would have recovered had the constitution at this tender age been vigorous enough to promote the complete absorption of antidotal remedies; but as I thought it not best to be as heroic in the use of the antidote named, in *this case* only the more mild means were used. It requires even more resolution not to overdo the treatment in these cases than to act at all. The anxious parents or friends will constantly urge and entreat you to do more than you are doing, and it is not easy to convince them of the danger of crowding the treatment beyond good judgment in such cases. As stated above, in poisoning by opium, the secretions are diminished and to a great extent suspended. Notably the salivary, pulmonary, hepatic and urinary organs. The vessels of the brain become engorged, the lungs congested, the blood poisoned by the retention of urea, which aids in deepening and making more marked the comatose condition resulting fron narcotic poison. Urea, one of the most important organic constituents of the urine, not being properly eliminated through the excretory functions of the kidneys,

these having been arrested by the action of opium, are no longer adequate to the proper elimination of this excrementitious substance; toxæmia is the result. It is a known fact that the physiological action of atropia affects in a decided manner both the afferent and efferent nerves. The *afferent* or sensory nerves transmit to the nerve centers impressions made upon the peripheral extremities of the nerves. In this way, the mind becomes, through the medium of the brain, concious of external objects. The *efferent* or motor nerves transmit impressions from the nerve centers to the parts to which the nerves are distributed, and these impressions influence the process of secretion, and in establishing *this*, much is done to overcome the condition due to the arrest of secretion.

I claim for ammonia a most valuable factor in the treatment of the severest cases of opium poisoning; not that it is curative in itself, but it is of great service in keeping up reflex action until the crisis is past, and the action of more important antidotal remedies have had sufficient time to act. As in Case I, it required the fourth injection of atropia to produce its physiological action, and by bringing the cutaneous circulation into action lessen the fullness of the vessels of the brain, preventing serous effusion into the ventricles, (of the brain) relieving congestion of the lungs and setting the whole mechanism into healthy normal action again as rapidly as is common in cases of less severe poisoning where the depression has been only moderate.

Article LIII.

Intussusception.

By A. Wislizenus, M. D. of St. Louis.

Last year I communicated in a number of the Journal an interesting and instructive case of intussusception in a child of eight months, with post-mortem examination. The comparative rarity of this disease and the diffiulty encountered often in its diagnosis and treatment induce me to put on record now another case of that disease in an adult person. Although, in the pres ent case, I fortunately had no occasion of verifying my diagnosis by a post mortem, I feel, nevertheless, confident that all the complex local and general symptoms pointed clearly to such a cause and the successful treatment based on that view goes to corroborate it.

The patient—Mr. L.—46 years of age, of strong constitution, has for many years led a most active life in superintending a very extensive business. As his family physician, I have occasionally prescribed for him in slight indispositions but never in any serious disease. In December 1881, he made by railroad, a business trip through Illinois, travelled by day and night in the cars and had to stop often in small towns where he was unable to find the comfortable fare to which he was accustomed at home. He ate, therefore, very little and the most simple food; only once he was tempted to partake very freely of a dish of baked beans and peas which he relished. But this kind of food to which he was unaccustomed, seemed after all not to agree with him. He felt oppletion in his stomach, occasional nausea and vomiting, became restless and feverish and determined to return home. Once at home, he thought by strict diet and rest for one day to overcome his indisposition, but finding that he grew worse instead of better, he sent for me the same night and I found him in the following condition:

The patient was very restless and feverish and complained of some pain in the abdomen, but far more of a violent and excru-

ciating pain in the spine from the dorsal vertebræ upwards, which seemed to increase sometimes in short paroxysms resembling opisthotonus. On examining him by pressure with the fingers over the whole spine no spot could be found in any of the vertebræ where the disease might be located; the sensorium was perfectly free. The abdomen from the pit of the stomach down to the navel was very sensitive on pressure and slightly tympanitic; but the most sensitive part was a point several inches to the right of the navel, where a cord-like and thickened intestine could be felt, from whence the pain seemed to radiate. The stomach was most irritable, rejecting everything, even cold water. In considering the diagnosis, I rejected first by exclusion, a simple gastric, catarrhal or bilious disorder, neuralgia, colic, poisoning, incarcerated hernia, meningitis, tetanus, mechanical injury to the bowels, typhlitis or any other antecedent inflammation of the intestines, and came to the conclusion that I had before me a most acute intussusception in a portion of the thinner intestines, brought on by an indigestion, and secondary affection of the spine by reflex action. If the first could be removed soon, the second would give way also. To obtain this result I put the patient first of all on absolute diet, allowing no food or drink whatever, only small pieces of ice to allay his thirst and ordered perfect rest in bed. When some indigested food or foreign body is driven into the narrow upper intestines, thereby causing pain, congestion, unequal contractions and intussusception, the invaginated part will still increase that spasmodic action which ought to be moderated or subdued by all means. Sedatives and antispasmodics are therefore indicated in this stage of the disease. For this porpose, I prescribed an emulsion with bitter almond water and laudanum to be taken often, but in very small doses with ice and ordered oil of hyosciamus with mercurial ointment to be rubbed over the affected part of the intessine and frictions to be made on the spine with chloroform liniment. As the patient had some straining in the lower bowel, but no operation, I applied myself an injection of nearly a gallon of tepid soap water with oil. I did not use for that purpose the now so fashionable long elastic tube worked by gravity, because it is not always on hand and its deep introduction not always without danger. I prefer the common rubber ball syringe, but place the vessel with the liquid one or two feet higher than the anus, so that it is worked both by gravity and force of hand. The

injection brought forth a great quantity of normal fæces and seemed to have emptied all the thicker intestines, but produced no decided relief. The sedatives with strict rest and abstinence, were continued the following day. One quarter of a grain of morphine was put every three hours on his tongue with a little ice which was well retained and gave more ease but no sleep. As in the beginning of his illness he had complained of a bitter taste and he had no further action of his bowels, I gave him on the third day the morphine with calomel—2 grains of morphine with 20 grains of calomel in eight powders—one powder every three hours. They were also well retained, produced some action of the bowels and for the first time in the night a long, sound sleep. The next morning the local symptoms in the abdomen as well as the reflex action in the spine had simultaneously disappeared. The swelling at the point of intussusception seemed to be quite reduced and the patient craved food for the first time. It was the beginning of convalescence. At first he was allowed only some milk and other liquid food in very small quantity, but as he digested it well, his diet was improved cautiously every day. His bowels were kept open by castor oil, but he still took some morphine every night sufficient to produce sound sleep. For a week longer he was obliged to be very cautious in his mode of living, but gradually regained his former good health and strength completely and is now as actively as ever engaged in his accustomed business life. All traces of the disease have disappeared.

ARTICLE LIV.

SUMMARY OF MONTHLY REPORTS OF THE MEDICAL DEPARTMENT OF THE SOUTHERN ILLINOIS PENITENTIARY, CHESTER, ILLINOIS, FOR THE SIX MONTHS COMMENCING AUGUST 1., 1881, AND ENDING JANUARY 31. 1882. SERVICE OF H. Z. GILL, A. M., M. D., PHYSICIAN TO SOUTHERN ILLINOIS PENITENTIARY.

MONTHS.	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Remarks.
Average Number of Convicts	354 0	356½	354.0	347¾	357¾	382 0	389.0	St L.
Temp. Maximum	101.5	104.0	100.0	85 5	69.5	61.5	69.0	69.0
Temp. Minimum	63.5	65.0	50.5	43.5	16.5	18.0	10.0	6.2
Temp. Mon. Mean.	80 5	83.5	76.7	62.5	43.0	40.8	37.6	32.1
Average No. attend'g Daily Sick Call	29.0	38 0	30⅝	17.5-6	14⅝	16¼	27.	....
Aver. No. in Hospital	11.6	10.8	10.0	7.1-7	6⅛	9¼	10.2	....
Aver. No. in Sick Cell	15¾	4.5-7	3.0	2.5-9	2.0	3⅛	5¼	....
Days lost from sickness (Sundays excep.)								
1. In Hospital	297.0	293.0	261.0	184¼	165.0	251.0	262.0	....
2. Sick Cell	413¾	128½	76¼	70¼	54 0	94¾	136¾	....
Total	710¾	421½	337¾	254¼	219.0	345¾	398¾	....
Deaths	4.0	1.0	1.0	0.0	0.0	1.0	1.0	....
Number sent to Insane Asylum	1.0	1.0						....
Amount of medical supplies issued to Convicts						$65.49 to Jan 10	?	
Aver. per Mo	$76.39	$76.39	$65.49	$65.49	$65.49			....
Antiperiodics. 6 Mo. $68.00	$25.60	$18.00	$12.39	$12.39	$12.39		$9.70	....
Number of men fed by the Med. Department.								....
1. In Cell House			107¾	112.0	122.0	241.0	253.0	....
2 In Hospital			307½	317.0	253.0	444.0	444.0	....
Total			415.0	429.0	375.0	685.0	697.0	....
Gallons of milk issued			55.0	90.0	85.0	101½	112.0	....
HOSPITAL.								
1. *Medical.*								
Intermittent fever		15	5	3	1	2	3	....
Remittent fever		2	2	5	3	3	2	....
Typhoid fever		1		1	1	2	1	....
Diarrhœa, chronic		2	5	1	0	1	1	....
Consumption					1			....
Other cases not here noted.								....
2 *Surgical.*								
* Removal of R. Eye			1					....
Piles			2	3	2	6	3	....
Fistula in Ano			1	1				....
Paracent's Abdominis			1	2				....
Rem. of tumor fr. face					1			....
Operation on Eyelids			1			1		....
Paracentesis thoracis							1	....
Palmar abscess							1	....
Fracture of right leg							1	....
Strangulated inguinal hernia right side							1	....
Bubo (syphilitic.)						1		....

A number of minor injuries and operations not enumerated.

* The patient from whom the eye was removed had suffered severely at times for many years. He has been entirely relieved since the operation. The eye was blind.

REMARKS.

The temperature was not taken with sufficient accuracy here except for the month of January, as may be seen for that month which compares favorably with St. Louis temperature as taken by the government. The other months are from St. Louis reports. Hereafter more care will be given in this matter.

The July report is from the meagre records remaining, and is given by way of comparison; and the number of convicts and temperature are added for the same purpose.

The culinary department of the hospital was added about the first of September. Previously the food was furnished from the general kitchen.

There have been *four* deaths in the *six months* of my service.

The *first* (in Aug.) was a victim of fever (typhoid) brought to the prison sick, after a long confinement in Cairo jail; thoroughly poisoned, and his general health greatly injured.

The *second* was a case of heart disease, severe attacks of which he had suffered before coming here.

The *third* was a case of Bright's disease in an old man. He came here quite sick, and died in less than a week.

The *fourth* was a case of consumption, far advanced when he came, and died in less than two months. Particles of the elastic tissue of the lung were being expectorated when he entered this institution.

The annual mortality as usually computed, would be 21.9 per thousand. New York was 31.7 in 1881.

We have not had a single death from acute disease or fever in any patient who was in fair health when entering the prison unless the *second case* should be so considered.

The typhoid fever cases, though well marked, were not of very severe grade. None of them died who had been in the prison any length of time before being attacked.

The weather was extremely hot in August and September, yet we lost no cases from heat-stroke, though some were severely affected.

Our cases of malarial fever—intermittent and remittent—have been treated with saline aperients, in the cases needing that class of remedies, and cinchonidiæ sulph. either in pill form or in acid

solution. The results have been eminently successful, seldom a second paroxysm occurring after the timely commencement of this remedy.

Some of the cases of chronic diarrhœa were of months' standing, severe in degree, and in old debilitated subjects. The treatment was largely dietary, and in some of the worst cases the diet was exclusively milk. All recovered, some of them beyond expectation. The use of milk in the diarrhœa cases, (subacute and chronic) has given great satisfaction.

The increased number of sick at sick-call and in sick-cells, in January was dependent upon the use of fresh pork and corn-bread to neither of which the men had been accustomed for a long time, and the undue use of which produced diarrhœa of more or less severity and obstinacy.

There has been no case of small-pox in or about the prison, and vaccination has been carefully attended to. Higgins' vaccine virus from the "Missouri Vaccine Farm" has been used mainly; and while it has given entire satisfaction, not a case of difficulty has occurred from its use.

There have been more than a dozen cases of piles, treated by carbolic acid hypodermic injections. Many of them were of years' standing, and they now, even the worst, declare themselves entirely cured. The amount of acid injected was from five to ten minims, dependent upon the size of the tumor. The acid used was the crystalized, with just enough glycerine to hold it in solution. The operation was made slowly, and the needle slowly withdrawn. The course has been mild in most cases, and the results have been entirely satisfactory.

The first case of *fistula in ano* was of long standing, and had been operated on several times before. The track was of considerable length. I divided it thoroughly; dressing first with tinct. muriate of iron to prevent any adhesion of surfaces, and later with cosmoline. The case was entirely cured. The second case was of minor importance.

The "Average per Mo., 6 Mos. $68.00," in July column refers to quinine alone.

Article LV.

NOTES ON CASES IN GENITO-URINARY SURGERY.

—Case No. VII.—

Contraction of large Calibre in the Penile Urethra.—Chronic Prostatis.—Sphincterismus.—Narrow Meatus.—Meatotomy.—Use of Cupped Sound in Conjunction with Dilatation.—Recovery. By W. Hutson Ford, M. D., of St. Louis.

R. E. B., æt. 23, a handsome and well-nourished young man, first presented himself on April 29, 1879.

He had been addicted to masturbation when about seventeen years of age, but had abandoned the practice as soon as he was old enough to know and appreciate its dangers. Had been very fond of women, and indulged altogether too freely with them, some three years ago, when the trouble first appeared. He has never had syphilis or gonorrhœa. He is a drug clerk, and his duties require him to stand a long time during the day. Masturbation.

Suffers from constant pain in the small of the back and throbbing in the perineum. Does not have to rise at night to make water. The stream, he says, is sometimes large and sometimes small. He is very despondent, and has been treated by various physicians, for kidney disease. He admits, however, that he has not been as frank to these physicians, in detailing his symptoms and past history, as he had been to me.

The prostate is considerably enlarged and quite painful on pressure, which also induces a desire to urinate. There is decided sphincterismus; the bowels are regular. Prostatic Congestion.

The urine is very acid, of amber color; and lets fall some strings and flocculent deposits of mucous. The penis is small and so are the testicles. The calibre of the meatus is only 20; there are several resisting points, at each of which the urethra is exceedingly sensitive. Indeed, the entire urethral tract is very hyperæsthetic. Urethral Hyperæsthesia.

Meatotomy to 28; C. S. 26 passed into the bladder.
Meatotomy. This gave great pain.

Ordered, diluents and alkali; iron, strychnine and ergot.

May 2nd, 7 P.M. B. B. 28 passed through meatus. He states that he suffers from great depression of spirits, after coitus. Some months ago he suffered much more from the pain and throbbing in the prostate than he does now.

May 7th, B. B. 28 passes to the bulb. B. B. passes the bulb, but not very easily. C. S. 23 passed and retained three minutes.

The subsequent history of the case is as follows: The sound was systematically passed for six weeks or two months every third or fourth day at first, and afterwards more frequently, with occasional passages, once a week of a full-sized cupped sound anointed with ointment of cocoa butter and tannin ʒi to ʒi. Cold baths night and morning, and tonic treatment. Occasionally he took some bromide of potassium, chloral and cannabis indica at night. He gradually improved, and became at length so well that his pain in the back left him entirely, and all his symptoms disappeared, only to recur after some
Recovery. imprudence, excess or unusual fatigue. The hygiene of the urethra was explained to him. I saw him in June, 1880, twelve months afterwards, and prescribed for him for a bilious attack. He had entirely gotten over his former troubles, was now very continent. He was stout, had lost his worn and haggard expression, slept well, and was in all respects greatly changed in appearance for the better.

Article LVI.

Spontaneous Fractures. By Pinckney French, M. D., Mexico, Missouri.

Since the management of fractures is rightfully regarded as one of the gravest duties of the surgeon, the consideration of anything in relation to their nature is of the utmost importance. While fractures in general are of very common occurrence, the subject of this paper, so far as my reading extends, is exceedingly infrequent,—in fact, it has been a matter of some controversy as to whether fracture of bones can be produced solely by muscular contraction. Of the instances on record,[1] [2] [3] the fractures in many are subject to no other manner of explanation. In a recent author, [3] are mentioned four cases. One in a man thirty-four years of age and in another forty-four, and in two the ages not given. Another author, [4] mentions the case of a man thirty-one years of age, where the humerus was broken in the act of throwing a chip. A female seventy-three years of age, femur was broken while turning in bed. A male thirty-two years of age, femur was broken in an effort at pulling off his boot, and again fracture in same bone a few weeks thereafter by striking against the bed. Three cases of fracture of humerus in well-developed and muscular subjects during feats of strength—ages not given. Same author reports a case in a subject where we should expect flexibility of bone, owing to preponderance of animal substances which they contain at this period of life, viz.: in a boy twelve years of age, both femurs were broken during an epileptic convulsion. It occasionally happens that the humerus is broken by a person striking at but not hitting another, or that the clavicle is fractured by a rider giving his horse a backhanded blow. [5] Same author mentions a case of a gentleman

1. Collation Cooper's Surgical Dictionary.
2. Summary Hamilton on Fractures and Dislocations.
3. Holmes' System of Surgery, Vol. I.
4. Gross' Surgery, Vol. I.
5. Erichsen's Surgery.

a little above fifty years of age, apparently in perfect health whose thigh was broken with a loud snap while turning in bed. And what is still more remarkable, intra-uterine fractures of the bones of a healthy fœtus are accounted for by abnormal muscular contraction, [6 & 7]

We need hardly admit that our knowledge of the real pathology of the morbid changes in osseous structures in these affections is obscure, which is owing mainly to want of opportunity to examine specimens after accidents of this kind, and we do not propose entering into a discussion of any length regarding it. But since it is the generally received opinion, [8] that no long bone can be broken in its shaft by the mere contraction of its muscles unless impaired by some morbid change in its structure and inasmuch as this opinion is sustained by all recorded reports which we have had the pleasure of perusing, we will mention the diseases that affect the general system in such a way as to be regarded as predisposing causes of these accidents. We may add before so doing, that a careful research of books within our reach discloses some conflict of opinion in this regard, but the weight of authority undoubtedly favors impairment of osseous structure. And while such impairment is generally present, it would seem that it was not at all necessary to the production of fracture, and therefore, technically speaking, deserves recognition and consideration only as a predisposing cause. "Cancer, syphilis, scurvy, rickets, mollities ossium, scrofula and lastly, (by some of our old authors) gout and rheumatism" have been enumerated as predisposing causes. From a careful consideration of all the cases reported, we may hold it as highly probable, that in the majority of instances the bones are merely affected through defective nutrition. The bones which usually suffer spontaneous fracture are humerus, femur, clavicle, radius, ulna, tibia, ribs and sternum, named in the order of their frequency. Bones commonly fractured by muscular effort and that solely are patella, os calcis and olecranon. The cause of fracture is usually regarded as exercising considerable influence over its subsequent course and results [9]. hence it is something remarkable that in the cases under discus-

6. Holmes' Surgery, Vol. I.
7. Holmes' Diseases of Children.
8. Holmes' Surgery, Vol. I.
9. Holmes' Surgery, Vol. I.

sion, recovery takes place quite as soon as in ordinary fractures. [10]

Thus imperfectly noticing a subject of so much importance to the surgeon, we report the following case:

On Oct. 12, 1881, we were summonsed by Dr. Holly, of this County, to visit a lady thirty-seven years of age—a well-developed, muscular, healthy looking little woman. On the evening previous to our visi, and and while dancing a waltz, she heard a snap noise and felt her left thigh give way. She was supported by her companion in the dance until a seat was procured, from whence she was placed upon a bed, and Dr. J. J. Holly, of Benton City, was requested to visit her. In company with the Doctor, we saw the lady about 11 o'clock the following day. She stated she did not come in contact with, or strike anything at the time of the accident, and at the moment her limb gave way she was neither in rapid motion nor making extra efforts to glide or turn herself. Investigation disclosed fracture of upper third of left femur just below trochanter major. Some swelling and tumefaction was present, which to a certain extent precluded an accurate understandiug of the condition of the broken bone as to size, etc.

A temporary splint was devised, and after fracture was properly adjusted, was placed upon the limb. All of the splints of which we were then possessed being in use, we were compelled to seek one in St. Louis, Chicago and then New York City. Owing to the delay thus occasioned, the limb was allowed to remain in the temporary apparatus until the eleventh day after receipt of injury.

During the application of the splint, it was observed that the bone fragments were agglutinated so much so, that by careful manipulation they did not suffer displacement while readjusting the limb. We used endless screw straight splint extension by adhesive strips, counter extension by perineal band. On Nov. 24, 1881, splint was removed; on Nov. 27, two days thereafter we visited the case and found union of bone was not of sufficient firmness to preserve shape and position of the limb. Reapplication of splint was made, omitting counter extension. On Jan. 5, 1882, splint was removed and starch bandage applied, which was allowed to remain about two weeks, when union was perfect with no appreciable shortening. She now uses crutches, fearing

10. Gross' Surgery, Vol. I.

the limb is not sufficiently strong as yet to support the whole weight of the body.

Interrogatories were instituted and elicited the following: no cancer, no scrofula, syphilis, scurvy, mollities ossium, rickets or any hereditary disease in the family history. Had enjoyed good health but suffered from what her family designated rheumatism, had much pain almost constant at or near point of fracture deep seated and particularly severe at times for several weeks prior to the accident. Her history disclosed nothing upon which to predicate such an opinion. She furnished no evidence whatever that she had suffered an attack of acute rheumatism. No chalky deposits about the joints and enjoyed apparently the best of health with the exception of the pains of which we have just spoken. These pains or similar ones annoyed her considerably during confinement. Resort was had to liniments for relief. Owing to the tardiness of firm bony union, recourse was had to the administration of Hypophosphites with elix. gentian and ferri; she is now free from all pain but the shaft of the broken bone appears much enlarged throughout its entire length. On the part of Dr. H. and myself we desire to return thanks to Drs. Hamilton and Dodson of Mexico for valuable assistance in the treatment of this lady.

Translations.

Article LVII.

FROM THE FRENCH.

Excerpts from Late French Journals. [Translated for the Journal.] By A. H. Ohmann-Dumesnil, A. M., M. D., of St. Louis.

Actinomycosis Hominis.—Prof. Ponfick, of the University of Breslau, has published a monograph, the most complete up to the present, on the above new infectious disease. M. Vanlair makes the following interesting resumé:

This infectious disease is only known as such since a couple of years. After giving a history of its discovery and description by several authors amongst these being Bollinger, Israel, and others, the following are given as characteristics of the disease:

1. The disease begins generally in the *facial region* and the *superior part of the neck*, notably by the *teeth* and *alveolæ*. From this the lesion gradually descends towards the chest, abdomen and pelvis, giving rise to peri and para-pleuritis, caries of the vertebræ and ribs, psoas abscess and peritonitis.

2. It causes the formation of *metastatic foci* in different viscera, notably in the heart, liver and lungs.

3. It is locally characterized by the existence of burrows with fistulous tracts which differ from cold abscess in several particulars. Thus, the *orifices* of the fistulæ are numerous, of irregular form and surrounded with a skin excessively thin, flaccid, bluish, with serrated edges and without inflammation of the interposed tissues. If a probe be introduced it is lost in a *labyrinth* of fistulæ whose walls are covered with fungous granulations. Despite this anæmic appearance, these granulations are dotted with yellowish white spots representing the remains of former extravasations. The *secretion* is serous and it can only be brought out by repeated pressure. It is in this secretion that the characteristic grains are found.

4. The *course* of the disease is generally slow. The mean duration is one year.

5. Some patients recover, but the majority *die* in a marasmic state complicated by amyloid degeneration; others are carried off by pyemic accidents; others by cardiac, hepatic or pulmonary complications.

6. If the above do not suffice to recognize a case of actinomycosis hominis, recourse may be had to *inoculation*. The bovine species is especially susceptible to the fungus whose introduction in the subcutaneous or intermuscular tissues or in the peritoneal cavity, has given rise in the calf, to the developement of numerous actinomycetic tumors, found primarily about the point of inoculation and later propagated to distant points. Injection in the blood has produced pulmonary foci. It takes but a month to make the lesions manifest themselves. The rabbit and dog appear to enjoy immunity from this source of infection.

The fungus called *actinomyceton* has not been definitely classified as yet, the number of cases observed in man of actinomycosis being up to the present 17. In the serum of pockets and fistulæ are found small light yellow granules formed by the fungus and in suspension, which are pathognomonic. The fungus is visible to the naked eye and does not act as an inflammatory product, but as a neoplasm. The tumors always contain the morbific agent; and, like all tumors of a destructive tendency, die in the center whilst growing at the periphery, and constitute a transition between internal zymotic diseases and the malignant neoplasms. The author would assign it a place in nosology immediately following syphilis, farcy and leprosy.

The treatment is entirely surgical. The diseased teeth must be drawn and the alveolar wound disinfected. In certain cases enlarged tonsils must be removed. If a tumor is formed it ought to be removed immediately, for as soon as the disease is generalized all interference is futile.

Prophylactic treatment consists in the removal of infected animals and in proper care of the teeth. Of course, the habitat of the fungus outside of the organism, must be found to establish a true prophylaxis.—[*Bulletin de l'Acad. Royale de Méd. de Belgique.*

ROASTED COFFEE AS A DISINFECTANT.—Dr. Barbier, of Algeria, calls attention to the highly disinfectant properties of the powder of roasted coffee. He has used it upon decomposing cadavers with an immediate cessation of the disagreeable smell. He claims good results from its use in cases of ulcers of a bad nature and thinks that it might also prove valuable in anthrax, etc. Many to whom he has recommended this agent have expressed themselves as well satisfied with its action. The author does not attempt an explanation of the *modus operandi* of the disinfectant, but doubtless some one will soon determine this, if its value as an antiseptic becomes such as to warrant a research.—[*La France Médicale.*

ARTERIAL ELASTICITY.—M. Arloing has measured the power of arterial elasticity, by counting the number of seconds during which the elasticity alone suffices to keep up the circulation of the blood. The heart being stopped by galvanization of the pneumogastric, he has seen the blood-current move for 9 to 10 seconds, which authorizes him to say that each arterial systole does not simply return the impulse which it has received.—[*Progrès Médical.*

A SYMPTOM IN THE BEGINNING OF PREGNANCY.—Dr. Delattre thinks that sufficient importance has not been given to the significance of a phenomenon occurring at the beginning of pregnancy. This is the almost complete disappearance of phosphates from the urine. If search be made for them it will be found that, but a very small part being utilized for the development of the fœtus, during the beginning of pregnancy they are condensed almost entirely in the bones which they augment in size by forming osteophytes, considered erroneously for a long time as an error of nutrition, or increase them in weight.

During the latter months, the fœtus develops rapidly, and these reserve materials are drawn upon. The bones tend to regain their former weight and the osteophytes gradually diminish, and disappear entirely after the first months of suckling, during which time they have contributed to maintain at a normal figure the phosphates of the milk.

He advises giving phosphate of lime to pregnant women, especially to such as are badly nourished. He cites a case in which dentition first appeared in two children at eleven months. During the third pregnancy, the mother took phosphate of lime, and the child had its two first teeth at four months.

The author cites a number of examples corroborative of his views and insists that practice has clearly demonstrated the correctness of the above conclusions.—[*Gazette des Hôpitaux.*

CYANIDE OF MERCURY IN OCULAR SYPHILIS.—M. Galetzowski has noticed the remarkable efficaciousness of injections of cyanide of mercury to combat certain localizations of the syphilitic diathesis in the membranes of the eye. In cases of atrophy or neuritis of the optic nerve, or alterations influencing the choroid or the retina, ordinary specific treatment is often impotent and the albuminate of mercury, which he has experimented with in conjunction with M. Fournier, possesses but little more value. In several cases of iritis, choroiditis and even of atrophy of the papilla of syphilitic origin, cyanide of mercury has given very good results.—[*Progrès Médical.*

GENERALIZED HYPEROSTOSIS.—M M. Rathery and Leloir report a case, in the *Revue Mensuelle de Médicine*, of symmetrical generalized hyperostosis in a man aged 30, and apparently exempt from all diatheses. The affection which is extremely rare, appears to have begun with the skull and to have extended progressively to nearly all the bones of the skeleton. The head is increased in size, but there are no irregular exostoses on the skull, whose walls are very much thickened. The bones of the face are intact except the horizontal rami of the inferior maxilla which are increased in volume and the patient feels acute pain here. The scapulæ, clavicles, humerus and ulnæ are increased in size. The radii, carpi and phalanges are normal. There is also increase of volume in the bones of the thorax, pelvis and femurs; the tibiæ are markedly affected, being three or four times the normal size. Outside of this, the general state is good. However, there is a pronounced intellectual torpor; the patient is easily fatigued, and he somtimes has œdema of the legs in the evening, when he has walked. He often feels acute pains in the affected bones, which are either spontaneous or provoked by pressure. He sometimes suffers ataxic pains in the superior or inferior members.

But three other similar cases have been found recorded by the authors and all present about the same characteristics, never appearing before the age of 17, there being no special diathesis and no heredity.

The symptoms due to compression of the brain are the same. The various treatments employed have never furnished any special results.—[*Jour. de Méd. et de Chirurg. Pratiques.*

Article LVIII.

FROM THE PORTUGUESE.

Study of the Etiology and Nature of Beriberi. By Dr. A. Pacifico Pereira. Translated from the *Gazeta Medica da Bahia*, for the Journal. By Joseph Workman, M. D., Toronto, Canada.

It is especially the red corpuscles of the blood that serve as the vehicles, and he says everything indicates to us that the alterations shown in animals subjected to the action of a high degree of temperature depend upon the affection of these elements. We should not expect to meet in them gross morphological alterations; the processes of dissociation which here play the principal rôle, are probably special. Experience in pathology has demonstrated that the red globules of the blood die in a high temperature. Under this action the urine becomes dark, the red corpuscles are destroyed; according to Schultze and Westheim, and according to Mannassein, they are reduced in size and quantity. This high temperature action on the red globules of the blood, augments directly the hurtful influence of heat, by decreasing the quantity of the inspired oxygen. The experiments of A. Schmidt, on Guinea pigs, show that the blood of the heart of animals, killed by high temperatures, never contains, immediately after death, any oxygen. According to the same experiments, the blood in animals that have died after breathing for a considerable time, in an elevated temperature, contains hæmoglobin without oxygen, and no oxyhæmoglobin, or but mere traces of it. The consequence, he says, of this high temperature influence, hurtful alike on the morphological, physical and chemical sides, is failure of oxygen.

The delatorious effect on the organism is produced gradually and it increases with the duration of the action, so that in correspondence with this progressive alteration, morphological and chemical, the red globules of the blood, convert each time, a less quantity of carbon into its terminal products. The experiments

of Erler and Litten completely prove this; in one of these the animal expired normally, 0.570 grammes per hour, of carbonic acid. After two hours stay in an atmosphere of 38° C., the quantity came down to 0.32 gr. per hour, and after two hours more, it hardly reached 0.296 gr. Litten met with two alterations, as constant effects of high temperature on animals, in his whole series of experiments,—fatty degenerations, and disease of organic oxydations. Pettenkofer and Voit have demonstrated that in the animal body, in normal conditions, albumen may pass into fat, inasmuch as after the separation of nitrogen, the whole of the remaining non-azotized substance is not oxydized, and changed into water and carbonic acid, but from defect of oxygen it becomes in part retained as fat.

Hoppe-Seiler (*Medizinische Untersuchungen*, 1866–1871), says: "Fat appears to be formed in the organism principally when the receipt of albumen in relation to that of oxygen, exceeds the normal, or when with a normal receipt of albumen, there is a decrease of oxygen, from obstacles in the sanguineous circulation or in the respiration."

According to the explanation of Voit, the phenomenon of fatty degeneration is not essentially distinct from the formation of normal fat, excepting that in the former there is an insufficient oxydation of fat proceeding in normal quantity from the albumen, or an increase in the decomposition of albumen, from which there proceeds a larger quantity of fat than is oxydized. Accepting the latter hypothesis, which is justified by the increase in the elimination of nitrogen, it now remains to us to know what the cause is of augmentation in the decomposition of the albumen.

Frankel (*Archiv. f. Path. Anat. von R. Virchow*, Vol. 67) has shown that in a series of pathological processes, due to defect of oxygen, (through increase of temperature, asphyxia from certain poisons etc.) the albuminoid matters are abnormally decomposed, producing a larger elimination of nitrogen. The nature of the chemico-pathological process is then understood to be due to an excess in the decomposition of albumen, through deficiency of oxygen. As to the nitrogen, it is eliminated in the form of urea, but the non-nitrogenous elements, not being oxydized as far as their terminal products, they remain deposited in the organs in form of fat.

"The conditions which preside over the process, form a chain

of phenomena," says Litten, "intimately connected—diminution of entry of oxygen, increase in the decomposition of albumen, diminution in the elimination of carbonic acid and fatty degeneration." All these manifestations of impediment in assimilation and disassimilation may be regarded as dependent on the primordial agent—the elevation of temperature and its deleterious influence on the animal tissues, especially on the blood and its red corpuscles."

In order to demonstrate that fatty degeneration depended on diminution of the processes of oxydization, Litten varied his experiments. Having kept the animal for three days under the action of a high temperature (37° C.), he determined the quantity of carbonic acid expired, and he found it less than he had met with (0.054 per hour in an animal whose weight was 100 grammes); on killing the animal immediately, he found, on dissection, "*all the parenchematous organs in intense fatty degeneration.*"

Having kept another animal for three days in a temperature of 37° C., and found that it expired the same quantity of carbonic acid as the first one; he placed it afterwards in a more temperate atmosphere, and he found that the quantity of carbonic acid exhaled had become treble that of the first. After keeping the same animal four hours in the temperate atmosphere, he found merely slight traces of degenerations, thus showing, by contrasting the two experiments, that the removal of the animal from a high temperature to a lower, although it had previously been affected with fatty degeneration, caused it to disappear in two days, during which a notable increase took place in the expiration of carbonic acid. This fact of the expired carbonic acid, was verified in other experiments, in which the quantity was determined,first, in the normal temperature; second, during the stay in the apparatus, under high temperature; third, after restoration to the normal temperature.

"The increase in the expiration of carbonic acid, after the restoration of the animal to normal temperature, did not appear accidental,—" says Litten, "it was due to a physical process which plays an important role in the convalescense."

The body, hungering for oxygen, satisfies itself by large inspirations, and as soon as the cause ceases, (the high temperature) which brought the famine, by depriving the body, of this vivifying agent, the blood becomes richer in oxygen, the

process of oxydation becomes active, and in this manner it is rendered possible that the combustible hydro-carbon which had accumulated, shall, on the more free entry of oxygen, be completely consumed. "This is, in my opinion," saysLitten, "the process of restoration of the organs in fatty degeneration."

Leyden found in some convalescents, an increase in the expiration of carbonic acid, which he attributed in part to a greater quantity of hydro-carbon elements. But in the experiments of Litten, this cause was completely excluded, for the animals did not receive any food, and the same phenomenon was presented under the influence of air more oxygenated, thus showing the greater activity of the combustions.

In poisoning by the oxide of carbon, fatty degeneration was verified by Klebs, in numerous autopsies, (*Virchow's Archiv.* Vol. 32.)

Alcohol produces similar effects. In poisoning by phosphorus, also fatty degeneration, according to Frankel, Baur and others, the same series of phenomena are produced; they commence with diminution in the oxygenation of the blood, and a lowering of the production of carbonic acid.

It is the globular part of the blood that suffers the most profound attention in these poisonings, and the red globules become incapable of carrying the oxygen which has to serve for the nutrition and regeneration of the tissues, and the elements which ought to be eliminated, oxydized to terminal products, remain unconsumed, and deposited in the form of fat.

[TO BE CONTINUED.]

Proceedings of Medical Societies.

Article LIX.

ST. LOUIS MEDICAL SOCIETY.

Taken by the Journal's Stenographic Reporter.

Saturday Feb. 11th. 1882.

Why We Have Two Eyes and Two Ears.

Dr. Williams.—Mr. President: It may be interesting to ask why we have two eyes and two ears. At first thought probably, the gentlemen will not be able to determine the question. Two eyes are necessary to enable us to judge of distance. With two eyes we are enabled to determine with greater accuracy how far an object is from us. This is proven by many instances where persons lose one eye suddenly from any cause. Such persons, in trying to pick up small objects very frequently miss the distance; for instance, such a person, in trying to pick up a pin, is more likely to overreach or fall short of the object, than he is to miss it from right to left, because such persons are able to judge of direction but not of distance.

Two ears are necessary to enable us to judge of direction. It is an absolute certainty that a man with only one ear can not tell from whence a sound comes. This fact was forcibly brought to my mind this week by the examination of a gentleman from the country, who, some years ago, lost the hearing in one of his ears by the explosion of a gun; there was some internal injury to the ear that destroyed it. He told me that he was in the habit of hunting squirrels, and since he has been deaf in one ear it is a matter of necessity that somebody should go with him always, because he had a nice squirrel dog that he took with him, and this dog would run about through the woods and tree a squirrel, and the man could hear him bark but couldn't tell where the dog was, he couldn't determine at all what direction he was from him. He had to take a second person with him to enable him to find the dog after he had treed a squirrel.

Another person whom I recently examined, from Texas, had some cattle running at large in the neighborhood where he lived, and on one of these animals he had a large bell. One day he went to find the cattle but didn't know where they were. He could hear the bell but couldn't determine where the sound came from; and he hunted fully half a day, within hearing of the bell, for this herd of cattle before he found them, simply because he had but one ear and couldn't tell the direction of the sound.

These things illustrate to us positively that two ears are necessary to determine the direction of sound; while two eyes are necessary to determine distance. These are well established facts.

DR. POLLAK.—I would like to ask the gentleman if he has observed that a person who has lost one ear could educate the other ear to determine the direction of sound; or that a person who is blind in one eye can educate the other eye so as to measure distances?

DR. WILLIAMS.—I will say, that a single ear is never educated so as to judge of direction of sounds; while a person who is blind in one eye gradually learns to correct this wrong impression as to distance.

DR. JOHNSTON.—I would like to hear the experience of the president.

DR. DICKINSON, the President.—The chair will simply state that he has heard a great many complaints corroborative of what has been stated, in the main, in reference to the eye; but the difficulty of determining the direction of sound has not been so forcibly brought home to my mind as it seems to have been done to the mind of the last speaker. Unquestionably the eye admits of education to a very great extent, perhaps so as to overcome this difficulty; but certainly it must be a matter of education, and after considerable experience, the inability of a person who is deaf in one ear to determine the direction of sound has not been so forcibly brought home to me.

DR. JOHNSTON.—This is a novel question to ask. We might ask why do the fish in the Mammoth Cave have no eyes? Why is it that mud-fish have no eyes? The fact is they have no need of eyes, they are not necessary to their existence, and therefore they do not have any. But so far as my observation and acquain-

tance goes, a gentleman with one eye can see as well as I myself, and is just as capable of judging of distance. I have been laboring under the idea that two eyes, two nostrils and two ears was a provision of nature, that if we were injured in one, the other would compensate. Several cases have come under my observation where one testicle has been lost, and the men had just as many children as if they had had two. I take it that these are compensating organs. Why it is so I cannot tell. Now it is very evident that if I am addressing you, and the tympanum of this ear is destroyed and the wave of sound strikes the deaf ear, there will be no response to the sound; but if you turn your head so as to allow the sound wave to strike upon the tympanum of the other ear you will be able to judge of the direction of the sound. So if one eye is destroyed, both eyes having the same origin in the optic nerve, we have another to compensate. So if one eye is lost the other becomes more developed, more sensitive. In 1837 I saw Dr. Dudley operate for congenital cataract in a young man about 21 years of age. He restored his sight completely, in both eyes, but he had no idea of distance; he did not know how far he was from the wall, but would step backward and forward, until his experience taught him the fact.

DR. WILLIAMS.—Did he operate on both eyes?

DR. JOHNSTON.—Yes, sir; both eyes were restored. It was a very remarkable success; the man had been stone blind. So that the deficiency which the doctor speaks of will not answer the question why we have two eyes. I don't think that the few observations of my friend are sufficient to determine the fact. By the laws of evolution, as the animal is developed nature sees fit to give two eyes where two eyes are necessary to the animal existence; and where they are not needed she gives no eye at all.

DR. STEVENS.—I had a little experience that may perhaps be of some importance, I don't know that it would decide the question at all. Many of our older physicians will remember that some 25 years ago I suffered two or three years with ophthalmia. There was perfect opacity of the cornea of the left eye at one time, and it remains to a certain extent at the present time. But what I wish to state is this, while the opacity was so great that I could see nothing distinctly—I could not see the outline of an object with that eye—I couldn't take hold of an object correctly. I first observed it in taking a cup of tea from my wife, she sup-

posed that I had hold of it and letting it go, it fell to the table. That continued for several months, I had great difficulty in grasping an object. I would grasp to one side of it; but at the present time I discover no difficulty at all.

It is a remarkable fact that nearly all the organs of the body are duplicated, the brain, the penis, the uterus are double, although forming but one organ. The uterus, and the male organ of generation are double organs; and the brain is as distinctly double as it can be, and the parts perform, perhaps, different functions. Very interesting psychological phenomena are connected with this fact; and the fact is adopted, I believe, by the specialists and by the profession at large, that insanity never occurs so long as one side of the brain is perfect. One side of the brain may be completely destroyed, and the mind will not be affected unless the disease extends to the other hemisphere. So long as one is intact insanity cannot occur.

DR. FAIRBROTHER.—In answer to the question, "why have we two eyes?" it may be replied that, on account of the laws of light, of its refraction and aberration, two eyes are better than one. Thus there is a demand for them; and all nature is governed by the law of supply and demand. In the evolution of animal life some are cast upon dry land, while others find their home in the sea. Upon those of the land, legs become developed, and upon those of the water, the organs of swimming. Every organ of every living thing is the result of the demand produced by its surrounding circumstances. A bird would never have wings if there was not a demand for it to fly. In the carnivorous animals we find long and sharp teeth developed, while among the vegetable feeders these are wanting. In the economy of nature whatever is demanded will be supplied. And, on the other hand, we observe that when the demand for an organ ceases, that organ will in the course of generations, disappear, or so nearly so as to leave only the rudiments behind. Such are the laws of light that two eyes are demanded. If these were different, one eye might answer. If we had no light at all we would finally have no eyes at all. I do not agree with Dr. Johnston in the theory that we have two eyes in order that if one should be injured or lost, its place may be taken by the other.

DR. GREEN.—Instead of putting the question as Dr. Williams did: "Why have we got two eyes and two ears?" let us go back

and ask why is it that a body is constructed symmetrically? Why are the organs of the body formed of symmetrical halves united at the median line? As Dr. Stevens says, the penis, the womb and the brain are formed of two halves. In the abdomen the symmetry is somewhat disturbed, but there is still something of a symmetry. I think it is the result of this very law of symmetry which obtains in the very commencement, as soon as the cell begins to fill. I think the question should not be, why have we two eyes and two ears? but why are we built symmetrically.

DR. WILLIAMS.—A portrait painter with one eye can get along very well because it is not necessary for him to judge of distance. In the case of Dr. Stevens, he was unable to judge of distance and therefore the cup of coffee fell to the table. I have often observed persons with only one eye walking along and when they come to a rise in the sidewalk they knock their feet against it, or if there is a step they will stumble, because they can not judge of the distance. I do not say that this is the only reason why we have two eyes and two ears.

DR. HURT.—I doubt whether it would be proper to accede to Dr. Williams' proposition without some qualification. I think somewhat with Dr. Green, that the reason why we have two ears and two eyes, is because we possess a dual organism, that we are symmetrical, though I believe that some people are not exactly symmetrically developed, not so largely developed upon one side as they are upon the other; they are not symmetrical so far as size and perfection of development are concerned. I think the reason why we can not judge of distance accurately with one eye is because we are educated to the use of two eyes in the prehension of objects. We discover this after we have lost one eye, and we can not positively say that this defective judgement of distance will hold good with persons who have never had but one eye. It is the result of education; and it is said that it is much more difficult to unlearn, than it is to learn a thing; that is an adage that I used to be familiar with when I was a boy, and therefore, it was thought necessary to learn things right when we did learn them. If we are educated to the use of two eyes, we find it much more difficult to adjust our movements correctly with the use of one eye only. As to the necessity of two ears in judging of direction, I am not well satisfied, though possibly education has nothing at all to do with that. I had some

experience when I was quite a lad, which this discussion brings to my mind. My father lived in a woodland country, sparsely settled, and we used to let the cattle run out in the wild range in the summer season, and it was necessary occasionally to hunt them and not allow them to stray too far from the premises. Frequently I would be sent to hunt up the cattle early in the morning; they were usually about a mile and a half or two miles from home, and sometimes in going up a valley with a succession of hills upon each side sloping into the valley, I would stop and listen every once in a while for the bell. I could hear it, and I was positive that it was up in the mountains on that side. I would perhaps go a quarter of a mile or so in that direction and get on some rise of ground and listen, and then I was positive that I heard the bell upon the opposite side. And when I went to the opposite side I could hear the bell upon the other side again. Well, I did not understand it then. Now I know that it was the result of echo; when I was on one side I could hear the echo, when on the other side I heard the bell. The echo was quite a perfect imitation of the bell.

DR. ROSENTHAL.—In connection with this subject I will mention a case that I examined last Thursday afternoon. A druggist of this city brought his little girl to me to have her tested for glasses and he asked me casually to examine his eyes. On examining his eyes I found that the right was a little myopic, but almost normal; on examining the left I found opaque nerve fibres and decided atrophy of the optic nerve. I asked him how long he had been blind in that eye. He was astonished. He didn't know that he was blind in the eye. He attends to his business and seems to measure distances very well. He was actually astonished to learn that he was blind in that eye. He says that he has noticed that he had to turn his head sometimes in looking at objects.

DR. BERNAYS.—No one has touched, during the discussion, upon the only standpoint from which anatomical questions and facts can be satisfactorily explained and decided in the light of modern science. I refer to the theory of evolution based on the fact of natural selection, and the facts of comparative anatomy. You ask the question, why have we two eyes? or, why have we two ears? The question stated in this way can not be answered. The teleological theory utterly fails to explain any fact in anatomy

when you go to the bottom of it; and the only possible way of explaining those facts, is by the theory of evolution and natural selection.

Venesection in Puerperal Eclampsia.

DR. HENSKE.—I want to ask, is venesection necessary or useful in puerperal eclampsia if you have a plethoric subject?

DR. HURT.—I will make a few remarks on the question proposed by my friend on the right. I have practiced venesection in puerperal eclampsia, though I have not had perhaps, so large an experience in the treatment of puerperal convulsions as many of you present. The first case that I ever had, I met in 1856 on the open prairie upon the banks of the Humboldt river, nearly two thousand miles away, in an emigrant wagon. The convulsions set in before the child was born. The lady was a primipara, well developed and strong, of about 20 or 21 years of age. We were traveling in the valley of the Humboldt, when late one evening we overtook and passed a company of emigrants and we traveled in sight of each other for two or three days, when an elderly gentleman came into my camp one evening and stated that he was expecting his daughter to be confined, and having learned that I was a physician, he had pushed his teams a little in order to keep in sight of me, for though her mother was a good midwife they were still a little uneasy. I lold him, that being the case, I would make short drives. But it was not necessary, for early in the morning I was called and found that the lady had been in labor during the night, but had not yet given birth to her child; and though the waters had escaped, the os was not well dilated and felt hard and resisting. The patient being feverish and in great distress, I proposed to bleed, but the friends objected, so I sent word to my train to move on, and to detail a horse with a man to take care of him for me. I stayed with them more than half a day. The patient became desperate; every pain was a convulsion followed by coma. When they thought she was going to die they told me to do the best I could for her. I said, you have lost a good deal of very precious time, and if you lose your daughter don't blame my treatment. Well, I bled the patient until I had a wash-basin, which held half a gallon, three parts full. I bled her until she began to look pale around the mouth. She fell asleep after the bleeding and slept probably an hour, when she woke up in regular labor, and the

labor continued regularly for about half an hour when she was safely delivered, and at 2 P. M. I left them to rejoin my train That was what bleeding did in that case.

About six years ago I was called to attend a primipara, a poor wash-woman. I noticed that her feet were very much swollen, and I felt a little concerned about her. She was delivered, however, without convulsions at about twelve or one o'clock at night and got on pretty well until about the same time the next night, when she was seized with very violent convulsions. In her case I resorted to chloral, followed that with chloroform and not succeeding very well, I tried nitrate of amyl as an experiment; but I did not succeed except temporarily. Finding I couldn't succeed in keeping down the convulsions without keeping her under the anæsthetics, I proposed to her friends that I should bleed her. I did so with their consent, bled her copiously and immediately after the bleeding I injected a full dose of morphine hypodermically. She had no more convulsions. She had had from one o'clock in the morning to eight or nine of the same morning, sixteen very violent convulsions. More recently I saw a case of a lady about thirty years of age. She had been confined and a few minutes after her midwife left her, she was seized with a very violent convulsion. That was about twelve o'clock at night also. When I reached her she was just going into one of her convulsions, and I think it was one of the most violent convulsions that I ever saw. This may be partly owing to the fact that the violent shaking of her head caused her false teeth to fly out, and she looked to me as if she were going to shake her head off. She was the wife of a circus man and he away from home, she was among strangers comparatively. I proposed to bleed her as I had had better success from bleeding than from any other remedy that I had used. They said: Do as you think best; we think she must die unless something can be done for her. I bled her although she was a delicate lady. I bled her copiously, but I followed the bleeding with a hypodermic injection of morphine and she had no more convulsions. I mention these cases to show that between the two remedies I have had better success especially with the bleeding. I have had better success with it than any other remedy.

DR. POLLAK.—Where did you inject the morphine?

DR. HURT.—Into the arm.

DR. JOHNSTON.—How much did you use?

DR. HURT.—I suppose I used a quarter of a grain. When I used the morphine, it was original with myself; but I see very recently it has been reported as one of the best remedies for puerperal eclampsia that can be used; and it is necessary to give it in a full dose; one that will put the brakes right down.

DR. POLLAK.—Do you think it would do as well without the bleeding?

DR. HURT.—I saw it stated in some journal recently, that the morphine without the venesection is effectual in controlling the convulsions, and I should think in the absence of plethora, it would be sufficient.

DR. BLOUNT.—Have you had any cases in which you did not bleed?

DR. HURT.—No sir; I never had a case in which I didn't bleed; and I never lost a case.

DR. HILL.—Did I understand it to be a rule with the doctor, that when he sees a case of eclampsia he begins immediately to bleed and inject morphine?

DR. HURT.—That has been my rule, though I have not seen a case since the one I last reported which occurred about a year and a half ago in my neighborhood. It is possible that in some cases it would be quite as safe to use the morphine alone; but in all plethoric cases I would abstract blood. I would do so especially where there was little hæmorrhage after the removal of the afterbirth. Most pregnant women are plethoric; that is my opinion, and especially so when we have blood poisoning from inaction of the kidneys. While you weaken your patient, and possibly set her back a little, you get rid of a certain portion of the poisonous material of the blood—urea possibly—which gives rise to the convulsions.

DR. JOHNSTON.—This question if asked 25 or 40 years ago would have been considered by the faculty as outside all reason and experience of mankind. Before chloroform was brought into use I happened to witness some cases of puerperal convulsions in plethoric patients at the commencementt of their labors, and it was the custom then to bleed freely and give an anodyne, not a hypodermic injection as Dr. Hurt refers to. If the convulsion

continued, still to take more blood; perhaps as much as 60 or 70 ounces; and the question must occur to the gentlemen in this room: Why this phlebotomizing? We did not then have the means that we have now. We did not then have chloroform; and as the the gentlemen know, bleeding to syncope is one of the most powerful remedies known to the profession to relax muscular contraction. The reflex irritation from the womb to the sympathetic nerve brings about a contraction of the muscles and forces the blood to the three centers, the brain, the lungs and the abdomen. If you bleed freely, the quantity of blood in the brain is reduced. I consider any member of our profession to-day who is called to a plethoric lady who is suffering from eclampsia and would not bleed her ad libitum, should be held accountable for malpractice and I think the profession will sustain me in my strong assertion and upon physiological laws. In these puerperal convulsions, if you watch them, you find that the brain is engorged with venous blood; you find that the blood is not returning to the heart and arteries as rapidly as usual and therefore an amount of hydrocarbon is retained in the blood, poisoning the nerve centers; therefore, it is necessary to relieve this quantity of blood in this patient, before you use the chloroform. Chloroform puts the patient in a high state of intoxication, destroys sensation: and to use this remedy in a plethoric patient, with the brain gorged with blood, will be a hazardous practice. This practice of giving hypodermic injections has been recommended in *Munde's Obstetric Journal.* Now I contend that that is a hazardous practice, because your patient is plethoric and you may produce apoplexy of the brain and lose the patient if you completely narcotize her.

DR. WESSELER.—The first remarks that I made in this society were, I believe, to relate a case very much similar to the first case Dr. Hurt reported. And I think that those are the cases that especially require bleeding. They ought to be bled to relieve the pressure and relieve the brain. We ought not to narcotize with narcotics or chloroform. I think that bleeding is the proper remedy to relieve the pressure.

DR. SCOTT.—This question, shall we bleed in puerperal convulsions? would bring us back to the question, shall be bleed an anæmic patient? There are certain forms of puerperal convulsions in which we are justified in bleeding, and there are other

forms in which we would not be justified in bleeding. There are three forms of puerperal convulsions: the plethoric, the hysterical and the apoplectic. In the plethoric cases the bromide of potassium and chloral answer a very good purpose; in the hysterical cases I would give anæsthetics; and in the apoplectic we would bleed. That is the rule which I think should govern these cases. I don't think we should bleed simply because it is puerperal convulsions.

DR. JOHNSTON.—The question asked was whether we should bleed a plethoric patient?

DR. GREEN.—I think that venesection in puerperal convulsions does good sometimes; when you have a plethoric woman, a strong woman of full habit, it sometimes acts like a charm. But I don't at all agree with Dr. Johnston, that a man who doesn't bleed a woman who has puerperal convulsions should be tried for malpractice. We may have just as good results from the use of chloroform, as we can by bleeding. If we use chloroform we should keep our patient under the influence of the anæsthetic; keep on with the chlorform so that not a single muscle moves, we can get along in a good many cases; in fact in the majority of cases, without venesection. If we bleed a patient it will not take long before we will have the same quantum as before. The fluid is taken up and the fluid circulating in the vessels is replaced as it was before and the pressure will soon be there again. But is it merely pressure that causes the disease? We have cases of puerperal convulsions where there is actually an anæmic condition. Where is the pressure here? We may have puerperal convulsions taking place in plethoric women or anæmic women; it isn't the pressure alone that causes the trouble.

DR. HURT.—We must of course use discretion in bleeding in puerperal eclampsia. One of my criteria would be to estimate the quantity of blood that has been lost in the birth. If the convulsions precede the birth, it is usually safe to bleed. If the patient is not very plethoric, not of very full habit and has lost considerable blood during the labor, I really would be afraid to bleed. We know that most animals that are decapitated, or that die absolutely from loss of blood, die in convulsions. So it would not do to bleed indiscriminately. In cases of threatened convul- we might use chloroform, chloral, the bromides and so on; but among the sedatives I am satisfied that the most potent of all is

morphine, and I would prefer using it hypodermically for the reason that it is prompt.

DR. JOHNSTON.—I would like to say a few more words. Now the question asked was: shall we bleed a plethoric female in puerperal convulsions? and I presumed that it was meant before the child was born. By plethoric patient, I understand we mean one who has an excessive amount of blood in the vessels, this causes a reflex action from the womb to the cerebral centers, thereby producing a contraction of the muscles, and if this contraction continues long enough, the patient must inevitably die.

SATURDAY Feb. 18, 1882.

The Technique of Gastrectomy. By F. J. Lutz, M. D.

MR. PRESIDENT AND GENTLEMEN.—I ought perhaps to offer an apology to you for venturing to occupy your time with the details of an operation, which has as yet, been but very rarely performed; and besides, what I shall have to say, cannot, for obvious reasons, be original; nor is it especially compiled for the present occasion, but is rather, a part of one of a series of lectures which I had the honor of delivering before the Medical Class of the Missouri State University, last month. I have been bold enough to repeat this lecture before you, at the solicitation of a number of the members of this Society, and because the text-books do not as much as make mention of this operation and the current English literature, has failed, so far at least as I am acquainted with it, to give an intelligent account of the various steps in its performance.

The very rapid strides which surgery has made in our day, has necessitated various additions to our vocabulary. Thus, formerly, the term "gastrotomy" was applied to designate Cæsarean section, as well as to describe an incision made into the abdomen for the purpose of removing some internal strangulation or a hernia—laparotomy as we now say—or finally to designate an opening into the stomach for the removal of a foreign body. Now-a-days, this latter procedure is meant when we speak of *gastrotomy*. *Gastrostomy* on the other hand, means the establishment of an artificial fistula into the stomach for the purpose of introducing food, when an obstruction exists in the œsopha-

gus; whilst *gastrectomy* is the term employed to describe the removal of a portion of the stomach.

Much of the success which attends this latter operation depends upon the selection of proper cases, and here the diagnostician must come to the rescue of the surgeon or rather, he must prepare the way for the operator. If a correct diagnosis is made, if the diagnostician can positively say that a certain neoplasm is limited to any particular portion of the stomach, the surgeon's work is very much facilitated and if this diagnosis be made early in the progress of the disease, the patient's chances for recovery are very much increased.

According to the researches of Gussenbauer and Winiwarter, the pylorus is the most frequent site of primary cancer of the stomach, and they have also demonstrated by statistics, that cancer of the pylorus attacks the neighboring organs at a comparatively late stage of the disease. In the 903 cases of gastric cancer which these gentlemen collected, the neoplasm originated 542 times at the pyloric end. In 223 of these, no secondary deposits were found on post-mortem examination; and in 172, no adhesions with neighboring organs had been found.

Nor must the observation made by Rokitansky be forgotten, that cancer of the pylorus rarely extends to the duodenum.

Before entering upon the discussion of the various steps of this operation, it will not be unprofitable to briefly glance at the anatomy of the part involved.

You know how very much the position of the stomach changes, even in the normal condition of affairs, but when diseased and especially when the disease is a new growth and involves the pylorus, the difficulty of locating the pyloric end is infinitely increased. Instances occur in which the carcinomatous pylorus has been dragged down to the symphysis pubis on account of its weight, or again, it has been found immediately above Poupart's ligament on the right side. And it quite frequently occurs that the pylorus is found on either side of, or above or below the umbilicus.

Besides the increased weight, the adhesions which have been formed with the surrounding viscera may also change the position of the pylorus.

The connections of the stomach are of great importance and it will be well for me to mention the *small omentum* or the gas-

tro-hepatic omentum; the large omentum especially the gastro-colic ligament. That part of the peritoneum which forms the hepato-duodenal ligament, must be especially mentioned, because it should not be cut for it serves to hold up the duodenum, it being inserted partly at least into the horizontal portion of the duodenum.

As shown by the accompanying fig. 1. the gastric and the gastro-epiploica sinistra arteries would be cut if the whole stomach were resected. As a rule, the hepatic artery and the gastro-epiploica dextra are cut. The gastro-epiploica-dextra forms as you know a loosely attached wreath around the greater curvature of the stomach and can very easily be separated from it.

We must remember, also, the anatomical fact that the gastro-epiploica dextra is a branch of the gastro-duodenal artery which passes downwardly *behind* the pylorus and then after giving off its gastric branches (of which the largest is the gastro-epiploica dextra) it passes to the duodenum and pancreas as the pancreatico-duodenalis. This gastro-duodenal artery then may very easily be wounded if any adhesions exist between the pylorus and the neighboring viscera.

Of the veins which may become involved, I will only mention the vena gastro-epiploica dextra which empties its contents into the superior mesenteric and the gastric which terminates in the vena portæ.

The important nerves are the anterior gastric plexus, which covers the anterior part of the stomach and which is formed by the anterior or left portion of the vagus. It has numerous connections with the sympathetic system, which are especially supplied by the cœliac plexus. On the posterior surface of the stomach there is the posterior gastric plexus which originates from the abdominal portion of the right vagus nerve.

Along the lesser curvature there are 3–5 lymphatic glands and along the greater, from 4–7.

Nor should we forget to carefully locate the entrance into the duodenum of the ducts which carry the bile and the pancreatic juice. The ductus communis choledochus, the common, excretory duct of the liver and gall bladder, opens as you know in common with the pancreatic duct upon the summit of a papilla situated at the inner side of the descending portion of the duodenum, a little above its middle.

You will also remember that the upper smaller lobe of the head of the pancreas is attached to the left and posterior surface of the vertical portion of the duodenum, and is, therefore, not endangered during the operation.

When it is intended to practice resection of the stomach, the patient should be anæsthetized and a thorough examination be made in order to thoroughly appreciate the volume, mobility and adhesions of the tumor. For several days preceding the operation, nutritive enemata should be administered, and for several days and about two hours before the operation, the stomach should be carefully washed out with lukewarm antiseptic water.

Let us now pass through the steps of the operation:

In the first place, we should guard against infection by using every possible antiseptic precaution.

SITE OF INCISION.—Where the incision of the abdominal walls should be made is not yet definitely settled. Péan prefers to make it in the linea alba; Rydygier chooses an incision parallel to the linea alba and a little to the right, whilst Billroth makes a transverse incision where the tumor is most prominent. The reasons which he assigns for his incision are these:

1. The diseased portion of the stomach is at once brought into view.

2. It allows the operator to oversee the entire field of the operation, viz., the pylorus and the duodenum.

3. Prolapse of the intestines is less likely to occur, and finally,

4. If the cancerous growths should be adherent to the abdominal wall, the involved portion of the peritoneum and abdominal wall can at once be excised.

CONTRA-INDICATIONS.—After the peritoneum is divided, the surgeon surveys the field and dependent upon the fact, whether other viscera are involved or not, he proceeds, or abandons the operation by sewing up the exploratory incision. If the pancreas, the descending portion of the duodenum or the liver is involved, it is not justifiable to proceed. But if the transverse colon shares in the disease, to resect it and Billroth advises to complete the operation; but this involvement adds a grave and difficult complication. If it is found, after a careful examination, that the

tumor can be removed, it should be drawn as far as possible into the wound and we can then determine where the incisions should be made and to what extent we must free the neoplasm from its normal and pathological adhesions.

ISOLATION OF TUMOR.—We now proceed to completely isolate the pylorus and the adjoining portion of the stomach and duodenum. This may prove the most difficult part of the operation. You begin by loosening the large omentum from the great curvature of the stomach and thereby sever the peritoneal connection of the stomach with the transverse colon. Before cutting any blood-vessels a distal and proximal ligature should be applied. It is found that in certain parts the omentum can be removed without bleeding.

The same process is then gone through with at the small omentum.

Infiltrated glands should be removed wherever met.

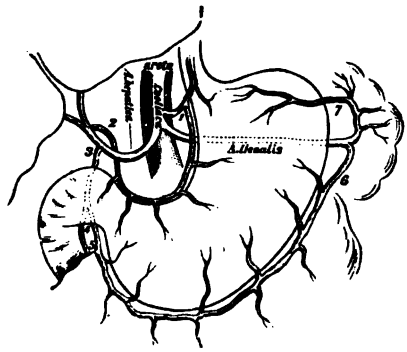
After the pylorus has been thus freed of all its connections, the most difficult and disagreeable part of the operation is finished.

To guard against the entrance of any of the gastric ingesta into the peritoneal cavity, a large soft sponge or a napkin, thoroughly disinfected, is placed under the stomach, which should now be drawn completely out of the abdominal cavity, so that all the subsequent manipulations can be done extra-peritoneally.

EXCISION OF TUMOR.—The next step is the excision of the diseased mass. The surgeon should by this time have determined in his own mind, what shape the stomach is to have after the excision of the pylorus. If we intend to attach the duodenum to that part of the stomach next to the lesser curvature, as shown in figure 2, and you will best proceed in the manner shown by figures 3 and 4.

Entrust the tumor, which has been firmly caught by a pair of strong forceps, to an assistant and then with a pair of scissors begin your incision on the side of the tumor nearest the stomach, at a proper distance from it and cut through both walls of the stomach at once. After each stroke of the scissors seize every spurting vessel and when the hæmorrhage is checked, continue the incision. If the stomach is not completely empty, its contents will begin to flow out and should be at once caught by

Fig. 1.



1. Gastric Artery.
2. Pyloric Artery.
3. Gastro-Duodenal Artery.
4. Pancreatico-Duodenal Artery.
5. Gastro-Epiploica Dextra Artery.
6. Gastro-Epiploica Sinistra Artery.
7. Gastrica Brevis Artery.

Fig. 2.

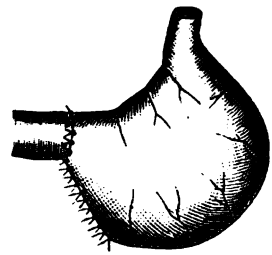


Fig. 3.

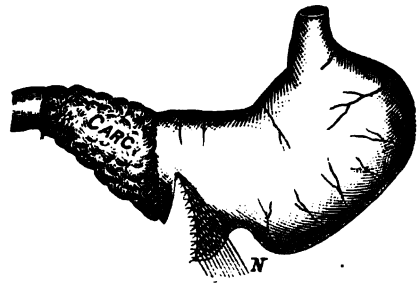


Fig. 4.

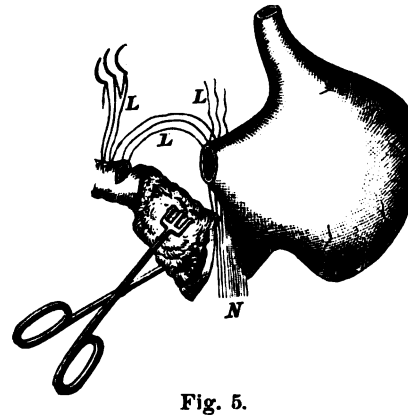


Fig. 5.

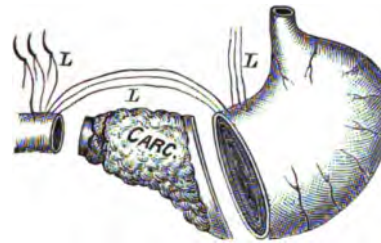
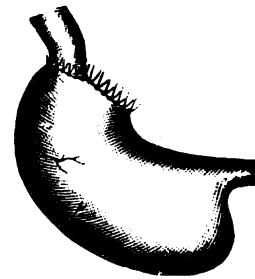


Fig. 6. (Rydygier.)

Fig. 7.



sponges and the stomach itself should be thoroughly swabbed out.

All the blood-vessels should now be ligatured with carbolized silk and the opening in the stomach diminished by the insertion of sutures in such a manner as to oppose the serous surfaces. As shown in figures 3 and 4 *n.*, the sutures should be allowed to remain, for they will form a valuable handle whereby to hold the stomach.

After the opening of the stomach has been thus diminished to the size as shown in fig. 4, *a*, the remaining portion of the stomach is divided and the bleeding vessels secured.

The carcinomatous pylorus is now attached only to the duodenum. To prevent the duodenum from slipping back after the pylorus is cut off, it should be transfixed by a strong silk ligature as shown in fig. 4, *l.*

The pylorus is then separated from the duodenum and all bleeding vessels tied and the duodenal opening should be closed by means of a well-fitting carbolized sponge.

INSERTION OF DUODENUM INTO STOMACH.—The insertion of the duodenum into the diminished opening of the stomach is the next thing in order. You begin your sutures on the posterior surface of the stomach and duodenum and as has been found to be very expedient, you insert the sutures from the *inner* surface.

In the making of this suture you invert the order which I spoke of to you, when discussing the different kinds of intestinal sutures. You insert your needle between the mucous and muscular layers of the stomach, pass through the muscular and serous coat, and on the opposite side enter it into the serous coat of the duodenum, pass it through the muscular layer and come out at the edge of the duodenal wound between the muscular and mucous coats. These sutures are made from the inner surface until the opening does not allow on account of its size to continue them (when the anterior part of the wound is united by the ordinary Lambert suture.). You see the mucous layer is not included in the suture, its edges will prolapse a little and thus close the wound completely. Where they do not do this, a few ligatures may be inserted.

It is of course apparent that all the knots of these ligatures are on the internal surface.

DILATATION OF STOMACH.—This is the most simple form of

reuniting the duodenum with the stomach. As seen in figure 7 it may also be inserted into the greater curvature or into the centre. In case the former is practiced, the incision should begin at the smaller curvature.

To prevent the formation of a pouch, which is most likely to occur at the greater curvature it seems advisable to insert the duodenum at this place, as a rule.

After making a thorough toilette of the peritoneum, every suture should again be examined and the whole should be returned into the abdominal cavity, and the abdominal wound is then closed and dressed antiseptically.

In the after-treatment the most important point is the nourishment of the patient. Ice—nutritious enemata. Billroth gave to the first patient he operated upon, on the second day a tablespoonful of cold soured milk every hour, which was well borne and the quantity was gradually increased.

NOTE.—As stated in the introduction to the above paper, originality is not claimed for it, but it is only a compilation from such sources on this subject as have been accessible. And being a lecture delivered before medical students, reference to the various authors was impracticable and therefore does not occur in the body of the essay. The illustrations are from Bock's Atlas, Wölfler and Rydygier.

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DISCUSSION.

DR. JOHNSTON.—Now the question comes up is this a justifiable operation? It seems to me it is intended more to show the skill of the surgeon than for any beneficial result. Bilroth has operated four times. In three of these, the patient died within four months, and the other has not been heard from. Now as cancer is a constitutional disease and will return within twelve or fourteen months, is the surgeon justified in inflicting this misery on the patient? I can see no justification for it; and I think this Bilroth is the boldest surgeon of modern or ancient times.

DR. HODGEN.—I should be free of adverse criticism of the gentleman growing out of experience in connection with the operation, but I have two points to suggest in connection with the operation. The Doctor described very carefully the manner of opening the stomach and it occured to me that when the stomach was opened first on the gastric side, instead of cutting entirely through, it would be well to make a small opening, insert a tube and draw off the contents of the stomach, swabbing out the contents. If this is done the probabilities of regurgitation are very much lessened. Another point is in connection with the application of the ligatures in finally closing the operation. The first part of the operation is done from the mucous membrane side as the Doctor very clearly showed, the last part, hardly as well, but also from the mucous surface except the last half dozen sutures which were left long. The needle is introduced from the free mucous side and carrying it back from the mucous surface leaving the ends outside long. These last sutures may be tied with the knots inside the stomach quite as well as the sutures in the beginning are tied with the knots inside the stomach, the last one being the only one which offers any difficulty at all to returning the knot to the mucous side, and that could be done readily by passing the free ends of the last ligature through the opening between the sutures. It occurred to me that this suggestion might be worth mentioning as there is a possibility of some one attempting this operation in this city. The question as to the propriety of the operation cannot be determined now. We cannot now say what the result will be. Abdominal surgery has made such strides within the last fifteen or twenty years that it is impossible to know that this may not

be a standard operation in coming time when we make the diagnosis early enough, when we locate definitely the site of the disease, when antiseptic surgery is carried so far that the abdomenal cavity can be opened as freely almost as any part of the body, we are justified in the conclusion that it is probable that this operation will one day be a standard operation. Up to the time of Spencer Wells the mortality in ovariotomy amounted to 75 per cent, now it amouts to about 20 per cent.

DR. JOHNSTON.—Keith reports his as two and a half per cent.

DR. HODGEN.—That is in a given uumber of cases. If I had reported my first case I would have had 100 per cent: If I report my 23 cases it is a good deal less. But I saw a case of cancer of the pylorus the other day in which the tumor moved very freely through a space of four inches. I could feel it very definitely through the abdominal wall, and determine its size. The cardiac extremity seemed to be the fixed point and as it contracted would draw the stomach towards the left side of the abdomen beyond the median line, and then return to the opposite side of the median line. Evidently this tumor was quite free; not at all adherent, every part was free and movable; and it seemed to me to be a favorable case for operation. Dr. Johnston, one of these days, will be forced to pass from the doctrine he has held so long, that cancer is necessarily and primarily a constitutional disease. It is always a local disease in the beginning and if removed early enough will never return.

DR. JOHNSTON.—If I recollect aright Dr. Lutz stated that the sutures should be inserted into the serous, fibrous membrane and not into the mucous membrane. Bilroth I see by an article in the *American Journal of Medical Sciences* states that they should be passed through the fibrous membrane. Dr. Hodgen suggests that they be put into the mucous membrane, and I dont see why they should not.

DR. HODGEN.—I did say that the final sutures might be introduced from the mucous surface; I didn't say through the mucous membrane, I didn't refer in any way to penetrating the mucous membrane. I said from the mucous surface, from the inside. Dr. Lutz stated that the first sutures which were made on the posterior wall of the stomach were made from the mucous surface, the inside, and that the knots were left inside the stom-

ach on the mucous membrane; but that the last sutures were put in differently, and I suggested that the last sutures, if they were drawn together, until all were in position might be put in the same way, from the mucous surface. That was the suggestion with reference to the sutures. Not that I criticised Bilroth or anybody else. I simply made an additional suggestion, that the operation might be completed as it was begun.

DR. DUDLEY.—I want to ask Dr. Hodgen if it is always necessary to close a wouud made in the stomach. Say, for instance, after the removal of a foreign body from the healthy stomach, where there is a small wound made. Is it always neccessary to close it with sutures?

DR. HODGEN.—The doctrine of the profession with reference to wounds of the alimentary canal is that if they are small it may not be neccessary to close them with sutures. It is better they should not be closed, if they are very small. The sutures may make the wound larger.

DR. MUDD.—I have been interested in the description of this operation, because it shows the possibilities of relief to be obtained by surgery. The question as to whether cancer is a constitutional or local disease is not the primary question, except where the immediate dangers from the operation are very great. Even in this case where it may in time become constitutional, by the extirpation of the cancer we remove the focus of disease, we give very great immediate relief from pain and from the exhausting drains upon the constitution, and the patient almost invariably improves in his general condition. The relief is very much more marked, and more durable than is the relief obtained by narcotics, or from any other therapeutic measures that we resort to outside of operative measures. If the operation does not permanently relieve the patient it is yet justifiable; and the only question that can come up to controvert this measure is the danger to life. If it can be done safely with even temporary relief only, it is a justifiable one. There is no question in my mind that there are cases in which it may be done. It was not long ago that I saw an old woman, too old for operative interference, who had a cancer of the pylorus which was movable, free from the abdominal wall. You could pick it up between your fingers and move it about easily. The diagnosis

was easily made. If this had occurred in a younger person it is possible that permanent relief might have been obtained through an operation. I seriously question whether the operation will be valuable, the dangers are great and permanent relief very uncertain.

DR. BLOUNT.—I would ask what would be the effect upon the stomach when the pyloric valve is removed? Whether there would be any undue tendency for the contents of the stomach to pass before they had undergone a sufficient amount of digestion?

DR. LUTZ.—I can't answer that question. I have seen no statement about it. It seems to me that digestion would be carried on sufficiently for all practical purposes. It is not to be supposed that such a patient could take such food as requires long retention in the alimentary tract; on the contrary his food would be limited to milk, soup, broths, and other things that do not require a great length of time for digestion.

DR. FAIRBROTHER.—I rise simply to state that in my opinion the inquiry raised by Dr. Johnston as to why the mucous membrane should not be involved in the sutures is entirely legitimate. In rents in any other portion involving the mucous membrane, when we apply sutures hoping to obtain union, we implicate the mucous membrane for the very obvious reason, that we wish union to take place on the side of the mucous membrane, and we find that it takes place quicker there than it does in fibrous, serous or integumentary membranes. In securing by the first intention, where the sutures involve the mucous membrane we have the advantage of a much quicker union.

DR. MUDD.—If I understand, this idea of Bilroth for not including the mucous membrane in the sutures, was that the mucous surface, lapping over the sutures would protect the wound from the action of the gastric juice; it was not the injury of the membrane so much as the opening of the way to the juice that is avoided.

DR. JOHNSTON.—I am glad the doctor has made those suggestions. That is what I was trying to bring out. I was also going to refer to the idea suggested by Bilroth of an artificial valve. Where he should make the valve I don't know.

DR. HODGEN.—May I tell the doctor how it may be made? Now let my shirt sleeve represent the mucous membrane; and coat sleeve represent the fibrous layer. Now if we separate these two layers and cut off the serous layer a little further back, and stitch them together and turn them in we make an admirable valve.

DR. NEWMAN.—Dr. Johnston has referred to constitutional and local disease and from his remarks I am led to think that there is probably some misapprehension upon that very subject. Now I believe there are certain diseases which are local and others which are constitutional. Now phthisis is a constitutional disease, and it is frequently cured; and yet if the person has a consumptive diathesis and the constitutional cause which produces the disease is not cured, the patient, under similar circumstances, may have a return of the disease. And so with cancerous disease, a person may have a cancerous diathesis, and although the cancer which has developed may be removed, it is likely to return. Of course, it is not certain that it will return, nor is it necessary to say because it does return that the operation is useless. The surgeon removes the cancer, but he doesn't insure the patient that he will never have cancer any more. The probabilities are that the conditions which produced the first cancer may not occur again. A distinguished surgeon of this city removed a cancer from the breast of a lady—he removed the whole breast. That was some ten or twelve years ago, and so far as I know there has been no return of the disease. I see the lady quite frequently and she seems to enjoy perfect health; yet she has inherited a cancerous diathesis, and she may have a cancer somewhere else, just as a consumptive patient who has been cured of the phthisis may, under favorable circumstances, have a return of the disease; but that is no evidence that the disease is incurable.

DR. LUTZ.—I don't want to say anything. But the detailing of this operation at the pyloric end of the stomach suggests the question, why might not this operation be performed for ulceration of the stomach. The operation for cancer involving the pylorus is a much more formidable operation then the same the operation for ulceration of the stomach. Of course, the danger of the operation depends upon the site of the ulcer. If on the anterior part of the stomach I see no reason why the operation

should not be performed, and with perhaps better success than the attempt to remove the malignant neoplasm at the cardiac angle of the stomach. I think I have seen in the dead-house a case of ulceration of the stomach that could have been operated upon. So far as this operation upon the pylorus is concerned I think I have seen a post-mortem of a case in which the operation could and should have been performed. I remember at one time of having in the hospital two cases of stomach disease, one being a young man twenty-eight years of age, and the other an old man of fifty-three. The young man presented a papillomatous growth, near the pyloric portion of the stomach, about the size of a silver dollar. Both of them died. I have no doubt that they were both just such cases as would indicate this operation.

SATURDAY, FEB. 25, 1882.

A Fish bone lodged at the Root of the Tongue, closing the Glottis.

DR. PORTER.—As the lecturer of the evening is not here as yet, I think I can start a narration of cases, by narrating one that came under my notice, and which was very interesting to me. A gentleman, while eating a fish, a croppie perhaps, a fishbone became entangled in the pharynx.

When I saw him, however, he was breathing with a good deal of difficulty, and had little rest except when he held himself erect, and the tongue protruding. I didn't know how to account for it until I made an examination, when I found that the fish bone had become fixed, as it were, between the back of the tongue and the upper part of the epiglottis, so that when he put the tongue in, it made swallowing difficult, and pushed the epiglottis down, and inspiration would be stopped; when his tongue was out, this would almost entirely cease, he was almost free from dyspnœa. The bone could be seen very plainly when the tongue was pulled away. It occupied a posterior position almost horrizontal, and was attached to the back of the epiglottis. It had pierced the epiglottis apparently to the depth of the thickness of the epiglottis. It had also become entangled in the base of the tongue. I had to break the bone in order to pull it out, taking it out in sections. The mere fact that it was a foreign body in the lower pharynx, is nothing unusual; we meet this frequently; but the

rather peculiar phenomenon of the position of the tongue, was interesting to me. There have been comparatively, recently, some curious cases of malposition of the epiglottis reported. There has been one article written upon a case in which the epiglottis became entangled in the arytenoid cartilage; the tongue pressed backward and downward and closed the glottis. This was the first case that I have seen in which the pressure on the epiglottis interfered with the normal position of the organ.

Remarks on the Management of the Laryngeal and Cardiac Crises of Locomotor Ataxia.

DR. HUGHES.—The most distressing of the many distressing symptoms of this intractable malady are connected with the parts that are supplied by the pneumogastric, the spinal accessory, and glossopharyngeal nerves. The lightning pains are not at all comparable to the distressing dyspnœa and apnœa that attack these patients at times in the progress of the malady, and impress them with the imminency of dissolution I suppose that each individual medical man has encountered in the course of his life, but a limited number of these cases. I have not encountered many myself, but those which have fallen under my observation have been to me a source of more solicitude for the comfort and relief of the patient than the symptomatic expressions connected with any of the nervous diseases with which I am acquainted. Because, it must be borne in mind, that in these crises consciousness is intact, the intelligence is unimpaired—the patent is an intelligent and conscious witness of his or her distress, and the mind is filled with those overwhelming sensations that crowd upon the sensorium at a time when death, with each inspiration even, seems so iminent. The immediate occasion of these remarks was the recent death of one of my ataxic patients—a very estimable lady sent from Chester, Ill., and who came to me with the expectation of getting relief; and when a patient comes with the expectation of getting relief, and you find yourself unable to give it, the true physician feels pretty much like the man of many successful military encounters, who is chagrined and mortified in the face of the foe that he cannot conquer. There have not been a great many post-mortem examinations made upon patients who have died in a cardiac or laryngeal crisis; but there have been a few. In the *Revue de Médicine*, for July, 1881

——— described eighteen cases which had fallen under his observation, in which the crises occurred and in which he had an opportunity of making a post-mortem examination. In two cases he found atrophy of the vagus and accessory roots, and of the posterior pyramids, besides the usual typical changes in the cord at other places. There can be no doubt, I suppose, about the morbid central condition which gives rise to these distressing symptoms which occur in the downward progress of this intractable malady; and it is a knowledge of that fact which makes the management of them so difficult to encompass. There is no reflex irritation here, there is no local, peripheral source of the difficulty within the reach of surgery, to be removed. If there were, the resources of our art would make these crises less formidable. The gastric crises are insignificant as compared with the difficulties of deglutition, the alteration and loss of voice, and the distressing dyspnœa. The gastric symptoms as we all know, will often present themselves for a long time in the course of the malady without producing any very great distress; but when the disease attacks, in ever so slight a degree, the origin of the vagus nerve, or the spinal accessory nerve, then is the time when the trouble begins which you can only palliate but never cure, and you cannot prevent. The ophthalmoscopic examinations which have been made in these cases, have revealed no lesion. The symptoms are simply the local sensations of distress which are the manifestations of the central trouble in the cord.

Now if an individual has a case of laryngeal spasm from some other source, it is very easy to administer chloroform, or chloral by enema and overcome the spasm upon the same principle that spasmodic contractions are overcome in any other affection; but when you come to employ an agency like chloral hydrate or chloroform, for the amelioration of a symptom which is due to a central disorganization, a central change, a sclerosed or an atrophied condition in the vicinity of the pyramids, in the medulla, the question will come up in the mind of an experienced therapeutist: How much of the agent will the patient tolerate? How much of the normal conducting medium remains that will act responsive to the therapeutic impression that you may wish to employ? If it were a central irritation merely, the solution of the therpeutic problem were an easy one indeed. If our battery

at hand and we undertake to apply the constant galvanic current is from the centre to the periphery, the question that comes up in the mind is: How much of the normal nerve channel remains, and to what extent can we supplement the nerve force present? If we apply our battery, we discover that our patient is not long in becoming exhausted, and the remedy becomes itself a source of aggravation to the already aggravated condition of the patient. If I had not tried these agencies and realized from their practical application, their unsatisfactory results, I should not make these statements. If we insert strychnia under the skin, and undertake to goad the paralyzed nerves at their source, and to add to the conductile power we but aggravate the difficulty that we wish to relieve. It is a matter of practical demonstration and we generally try these things before we discover the error we make in our judgment. If we administer morphine hopodermically, we get no better results. We dare not, in certain stages, give morphine to such an extent as to produce sleep, else we may return and find that our patient has passed into the sleep that knows no waking. I am not sure but what I have seen one of my own patients whose life was terminated by the most cautiously induced sleep. I had seen this patient pass six nights without sleep, and at last determined to give morphine hypodermically. On returning, I found my services were no longer required. Then what are we to do in these cases? We cannot allay this distress completely. We cannot send the patient completely off to sleep by the administration of heroic doses, because heroic doses of hypnotics are contraindicated. I presume no other form of spasm could be mentioned in which a full enema of hydrate of chloral, or the free administration of chloroform would be contra-indicated; and yet, in cardiac and laryngeal crises of ataxia, the physician acts wisest who tranquilizes his patient by other means within the reach of the therapeutist; and induces that kind of sleep which is known rather as natural than as artificial. It is a singular thing that these crises are not persistent; it is a singular thing that a patient who is troubled almost constantly with unequal pupils, who has the lightning pains continuously; in the earlier period of the malady they may be continuous, where the knee phenomenon exists. But then this fact is not more singular than the other fact that the symptoms are sometimes all intermitted; as

I have seen in one case nearly all the symptoms intermit and disappear for nearly three months, in a case of some years' standing. Well now what are we to do in a case of laryngeal suffocation, of laryngeal dyspnœa amounting to apnœa at times? Possibly some of the gentlemen may have found some unfailing remedy, but if there are remedies for this purpose they have not fallen under my observation; and if I had known that there were any remedies for this distressing condition, these remarks would not be made to-night. But it has occurred to me that by calling the attention of the profession to these laryngeal conditions, and to the facts in regard to the difficulty of administering anæsthetics and hypnotics, that some other method might be found which is more beneficial. In my own experience I have tried electricity, I have tried strychnia, I have tried morphia, I have tried chloral, I have tried chloroform, I have tried hyosciamin and every known remedy that may be safely administered hypodermically. Perhaps I have not been bold enough in the four or five cases which I have encountered, to effect beneficial results; but I have been bold enough to satisfy myself that the ordinary methods of relieving laryngeal spasm, will not do in these cases. In some of these cases the pulse has gone up to 132 in a minute. Where the cardiac symptom is prominent, I have never found anything that gave any satisfaction except hot baths and galvanism applied to the soles of the feet, and that, seemed to afford temporary, limited relief. Probably as Charcot, and as Vulpian and other physiologists have demonstrated through the irritation passing along the sciatic nerve, producing increasing circulation and perhaps reinvigorating for the time being what little nucleus of the defective nerves still remains.

DR. RUMBOLD.—I would ask Dr. Hughes how he applied the galvanic current; one pole to each foot?

DR. HUGHES.—Yes, sir.

DR. GREEN.—Do I understand Dr. Hughes as using the word dyspnœa as meaning the same as apnœa?

DR. HUGHES.—I mean by dyspnœa, difficult breathing, from its Greek origin; apnœa is absolute failure to breathe.

DR. GREEN.—Very well, but there is a state of the system in which, the respiratory movements are at perfect rest because there is no necessity for respiration. What do you call that

state of the system where no respiratory movements take place, because of there being enough oxygen in the system? It is a physiological state at a certain period of life. This state of system takes place when the center of respiration which is located in the medulla oblongata, is not irritated, when there is no stimulation there, no respiratory action results; just as any other nerve has to be stimulated before action takes place, so it is here. The normal excitant or irritant of the center of respiration is the normal amount of oxygen and carbonic acid in the blood that circulates through the medulla oblongata. If the amount of oxygen and carbonic acid in the blood is of the normal state, the individual breathes easily and sweetly, hardly knowing that he is breathing. But as soon as this normal mixture is disturbed, if there is more carbonic acid in the blood than in the normal state, there is too much stimulation of the respiratory center and quick, hurried movements of the chest, and deep respiration take place; that is what we call dyspnœa—respiring with difficulty. Then again, if there is too much oxygen in the blood, which goes to the respiratory center, there is no respiration. A perfect rest of respiratory motion takes place; and why? Because there is no need of it. That is the case with the fœtus in utero. It has plenty of oxygen, and the carbonized blood flows; for this reason it has no need of respiration. Prof. J. Rosenthal has been making experiments on animals, and he found that when there was a sufficient amount of oxygen in the blood, no respiration took place at all; but so soon as he ceased to pump in the oxygen, of course, respiration again took place. That condition of the system, where there was no respiratory effort at all, Prof. Rosenthal named apnœa. Some of you may say, we don't agree with him as regards the term. But you have no other term for it. I have never seen in English literature, another term for that condition of the system. If the center of respiration is over-excited by too much carbonic acid, asphyxia takes place, there is a paresis of the respiratory centers.

DR. DEAN.—If by respiration we always mean the exchange of the gases of the blood through the lungs, the doctor's definition would be right; but there is a respiration that goes on without any action of the lungs whatever.

DR. GREEN.—By respiration I mean the respiratory movement.

DR. DEAN.—We do not call the change which is carried on in the fœtus in utero apnœa; we mean by apnœa a cessation of respiration through the lung.

DR. GREEN.—Apnœa means I do not breathe, or that the respiratory movements are at perfect rest. The admission of atmospheric air and the elimination of carbonic acid is a mere physical act, it is the result of creating a vacuum, or tending to create it, but the creation of a vacuum is the result of respiratory movements, which is a vital act. Apnœa, signifies accordingly, the entire want of respiratory movements, it is so understood in all the German works on physiology, and I think it is perfectly correct. We must have a term to express this condition and I think there is no better term than apnœa. That there is such a state no one will deny. We have seen a fœtus born which has already respired. Respiration sometimes takes place in utero. For instance, when hard labor is continued a long time, and carbonic acid in the fœtus is increased and the amount of oxygen diminished, the centre of respiration is stimulated, respiratory movements take place and as there is no atmospheric air to inhale, aspiration of the liquor amnii takes place. But this is not always the case; and why? Because it is proved that when a nerve is slightly and gradually over-excited, that nerve becomes dead. If the mother has pains for a very long time and no exchange of the blood takes place, the fœtus will die without any respiratory movements taking place.

When dyspnœa is continued for a long time asphyxia will take place; and if asphyxia lasts any great length of time paralysis takes place. The cause of the dyspnea is too much excitement; the individual tries to get all the accessible muscles of respiration into action and if this lasts for some time a sub-paralytic state takes place, but no paralysis, yet. He is not dead, however, he can be brought to life; but if this state of asphyxia continues for a long time, paralysis will take place and then life is extinct.

DR. JOHNSTON.—If I understand Dr. Hughes, he stated that a case had been sent to him from Chester, who was suffering from pharyngeal and cardiac spasms. Now what is this dependent upon? Is it an insufficient oxydation of the blood that has brought about this pathological condition? Surely the atmosphere of Chester is the same as that of St. Louis. The logical

line of thought that occurred to me while listening to the remarks of Dr. Hughes led to the inquiry, to what are we to ascribe this laryngeal spasm? It might occur from an active congestion. There must be either a functional or anatomical lesion at the origin of these nerves. If you have disease of these nerves, the lungs do not respond to the stimulation of the air, and you have difficult respiration; but if you have a perfectly healthy condition of the origin of these nerves, you have no laryngeal difficulty unless you have a hyperæmia, an excessive congestion of the various membranes and tissues connected with the larynx and pharynx the result of paralysis of the vasa vasorum, of the capillary system and the extremity of the nerves. But this case that Dr. Hughes has presented to-night resulted from some brain trouble. Now chloroform in such a case is contra-indicated because the blood is already excessively charged with carbonic acid, and if we give chloroform we increase the asphyxia. So also, if we give chloral or morphine we do the same thing. The next remedy would be nitrite of amyl. But an organic lesion at the origin of these nerves can only be cured by nutrition. Unless the physician can make a new organism he cannot cure his patient.

DR. HUGHES.—I want to refer to Dr. Green's question. There may be a pathological as well as a physiological dyspnœa and apnœa. We may have apnœa and dyspnœa from other causes than those which fall under the eye of the physiological experimenter. Now I suppose that it is not necessary to deny Dr. Green's explanation of the physiological cause of its extremest degree which has, I think, so justly been termed apnœa. If in the region of central nerve space between, say, the beginning of the corpora restiforma, the corpora olivaria of the medulla oblongata, and extending down to the sixth cervical vertebræ, within which region you have the origins of the pneumogastric, spinal accessory, and hypoglossal nerves, you have a morbid condition compromising the integrity of the nerves originating there, which preside over the function of respiration, and the movements of the heart, and which contract the larynx and pharynx; you may have a pathological condition which makes dyspnœa possible and which makes apnœa a legitimate result without undertakng a physiological explanation referable to blood changes, and you may have it whether the blood is sufficiently aërated or not; on the contrary, we may

have it when the blood is sufficiently aërated because of the trouble at the point of the origin of the nerves. Dr. Green is a well informed man and I am surprised that he should invoke a physiological explanation for a pathological effect. It is plain Mr. President, that if at the origin in the course of afferent nerves you have an intercepted communication from the peripheral source of irritation, as in the case of the pneumogastric, or spinal accessory nerves, you may have a pathological condition existing in the lung, and yet you cannot have the proper physiological impression made at the center, and if you have at the origin of these nerves a pathological status, how can you expect them to give forth a physiological response even to normal excitation? You would not expect anything but a jerking respiration and spasm of the larynx when you have atrophy or when you have selerosis of the medulla oblongata implicating the origin of the nerves which supply the parts below.

DR. JOHNSTON.—I would like to ask in what position this lady held her head?

DR. HUGHES.—She never seemed comfortable in any one position, but had to be moved about every hour. She was more comfortable when the head was lying on the right side generally. The head was not thrown back. The head was thrown to the right side generally, this was owing to the spasmodic contraction of the sterno-cleido-mastoid muscle.

DR. PORTER.—The literature on this subject is very meagre. Charcot was the first to speak of laryngeal crisis in 1879. Of course, the prognosis is unfavorable. If there is a central origin of the disease, and such disease cannot be cured, it is almost contradictory to speak of permanent relief of the symptoms. The laryngeal conditions are necessarily varied. I do not speak from large experience, I have seen one or two, possibly three, but these cases were not marked ones. The severity of the symptoms depend altogether upon the amount of central involvement. If the nucleus of one of the laryngeal nerves is affected or destroyed, there would then most likely be a paralysis of the muscles affected and finally of the cord upon that side. Sometimes, also, the abductor and adductor muscles are affected. If the abductor muscles are affected of course there is aphonia, more or less; if the adductor muscles are affected on one side only, or on both sides, as sometimes happens, there will be

dyspnœa. I think that any condition that affects the origin of any of the motor supplies will produce this laryngeal crisis. The motor supplies of the laryngeal nerve are many and so far down as the sixth cervical vertebra, and there may be several conditions producing laryngeal crisis. So far as the relief of the symptoms is concerned, we can only accomplish this temporarily. There may be of course, intercurrent spasms, but so far as our remedies are concerned, so far as we know, there is little that can be done to relieve the patient. Some one writing upon this subject more recently has suggested tracheotomy. Tracheotomy would only give temporary relief, and more than that the laryngeal symptoms are seldom as well marked as the cardiac symptoms; and certainly tracheotomy would do no good so far as the circulation is concerned. I do not think that we have any means of value in the treatment of these cases. It would probably be well if the symptoms were better formulated than they have been. I am not sure but what Mackenzie speaks as definitely on this subject as any other authority, but he has little to say about it.

DR. HEIDEMANN.—The subject this evening has been very interesting to me, as I am fortunate, or unfortunate enough to have a case of this kind under my care at the hospital. I have noticed the dyspnœa, but my attention has never been called to the larynx in this matter. I came to-night with the expectation of learning something of the treatment. I have been treating him for pain in the back part of the thighs for which I gave him iodide of potassium. This seemed to relieve him at the time. When he was troubled with dyspnœa I gave him ergot and found that it relieved the symptom. His appetite is generally good and he has no trouble with his mind. In his earlier days he was unfortunate enough to have syphilis. That was about twenty years ago. He was attacked with a paralytic stroke while in Philadelphia which was then pronounced locomoter ataxia. He never got entirely over it. The symptoms sometimes come on every two or three days. I first noticed the difficulty of breathing two months ago. I am very glad that this matter has come up.

DR. GREEN.—Dr. Hughes says there is a physiological and a pathological apnœa.

DR. HUGHES.—I don't wish to be understood as saying that

apnœa is a proper term to use in designating a physiological condition. There may be such a thing possible as a kind of apnœa by common consent that could be called physiological apnœa, that is, a momentary suspension of breathing.

DR. GREEN.—If the doctor doesn't admit that there is a physiological apnœa, what does he call that state of the fœtus in utero. You may say that the oxydation of the blood serves the place of respiration, but we are speaking of the respiratory movements, and I said, where the respiratory movements are at rest, not because the patient cannot breathe, but because he has no need of respiration. You can make experiments upon animals, and if you give them enough oxygen, all the respiratory movements will cease. The carbonic acid must be eliminated during the same time of course. But so soon as you cease to pump in the oxygen, the animal comes to and the respiratory movements begin again. It will be actual respiration, but if there be some difficulty, it will be dyspnœa. Then another thing, we know very well, I had a case once myself, in which a child was born in the membranes, the lady was affected with small-pox, the child respired and the liquor amnii was aspired. So soon as the exchange of oxygen and carbonic acid ceased the respiratory movements took place, and, as there was no air to be breathed, aspiration of the amnionic fluid occurred. The doctor says that by dyspnœa, we mean difficult breathing; that dyspnœa, when it lasts a long time, prevents the person breathing at all. Now sir, there may be a case in which a pathological condition exists in a person suffering with dyspnœa, labored respiration, so that he may cease to respire all at once, and that case would more frequently be called asphyxia. Asphyxia is the right term for this pathological apnœa. The state of dyspnœa does not go into apnœa, but into asphyxia.

DR. MULHALL.—I don't want to occupy much of Dr. Hughes' time, but I think he has assumed that we know too much about this cardiac and laryngeal crisis, and I simply rise to ask him when he makes the closing remarks, to give some details, if the time will permit, as to whether dissolution ever comes on during the attack, what are the permanant consequences, and whether he has ever examined the larynx during one, what was the nature of the cardiac involvement, whether it was like cardiac asthma for instance.

DR. HUGHES.—I should like to enter more fully into the subject on another evening, if the society want to be bored. You will observe that I have endeavored to be brief and I have taken it for granted that the members of this society were somewhat acquainted with this subject; and I intentionally omitted many details and specific symptoms which this patient had. The question that Dr. Johnston asked is a pertinent one: Whether the atmospheric condition is not the same in Chester, as it is here. It would havebeen proper for me to have stated that the laryngeal symptoms became prominent in this patient since her arrival in the city. She came to me as a patient suffering with locomotor ataxia. Her laryngeal symptoms were intercurrent. There was cardiac complication also. There was acceleration of the circulation, and increased ganglionic disturbance of the heart. The examnation of the heart revealed no organic lesion, no abnormal valvular contractions, nor enlargement. In the progress of these crises which finally terminated her life, she lost her voice. At first it had a peculiar whistle and finally she lost her voice altogether. She could whisper, but could not talk audibly. She did not die as one usually dies from asphyxia. I was not present when she died, but I was told that she died without great suffering. Dr. Stevens will remember the case of Mr. Kennerly who has had laryngeal crises for some fifteen years, at least it is some fifteen years since the man was first attacked with them, but they are very light. You do not have the same intensity of attack in all patients.

DR. PORTER.—I would like to endorse Dr. Mulhall's suggestion, that Dr. Hughes would formulate, as far as he is able, the laryngeal appearances in locomotor ataxia. I would like to know the diagnostic symptoms. So far I believe there are no diagnostic symptoms that we are able to depend upon. The writers on laryngology have not yet taught us much on that subject.

DR. HUGHES.—I think, Mr. Chairman, if there were any laryngeal symptoms of locomotor ataxia, that Dr. Mulhall, Dr. Porter or Dr. Rumbold would be much better able to relate them than I; and inasmuch as I have distinctly stated that the laryngoscopic appearances were few so far as observation had gone, I don't think it devolves upon me to demonstrate laryngoscopic appearances which are not. I do not understand the purport of the question. I have distinctly stated that the laryngoscope reveals nothing, but then why should I be asked to describe what I have not seen, and what nobody else with whom I am familiar has seen; that is, a laryngeal revelation—diagnostic revelation of sclerosis in the medulla oblongata; probably I have been misunderstood.

Periscope.

Article LX.

ANATOMY.

The Optic Tracts and the Visual Centres.—Tartuferi has in the Pathological Laboratory of Turin conducted a series of experimental researches on the optic tract and the visual centres in the cerebral ganglia and cortex cerebri. From a note in the *Italia Medica* (No. 5, 1880) it appears that he has arrived at the following conclusions:—

1. Where the corpus geniculatum externum appears to be smaller it is often dependent upon the sclerosis of the optic tract which extends over it.

2. It is not true, as up to this time has been stated by anatomists, that all the fibres of the corpus geniculatum externum belong to the optic tract. It only forms a small part of its medullary cortex, and passes over it without entering into any intimate connection.

3. The corpus geniculatum externum cannot be considered as belonging to the mesocephalic centres of the apparatus of vision. Assuredly, at least, it has not the important significance which some anatomists would attribute to it.

4. The inferior commisure of Gudden is not, as its discoverer imagines, a simple commisure between the two optic thalami and the two corpora geniculata interna.

5. The greater part of the inferior commissure of Gudden, which is in connection with the two corpora geniculata, and especially with the external one, probably goes to compose the inferior portion of the superficial white and grey layer.

6. There are no fibres of the optic tract on the surface of the optic thalamus.

7. The thalamus is not a visual centre.

8. What is called the inner root of the optic tract going to the thalamus (innere Sehhügel-wurzel of Meynert, or tiefere Wurzel-bundel of Studa) does not belong to the optic tract.

9. The fibres which compose the so-called root of the corpus geniculatum internum (Huguenin) does not belong to the tract, but to the inferior commissure.

It results from these four last conclusions that of the five roots of the optic nerve recently admitted (Huguenin, 1879) there is only one real root which passes over the corpus geniculatum externum without entering into it, and goes to the anterior tubercle of the corpora quadrigemina.

10. The diminution of the punctus occipitalis is due to atrophy, and not, as Gudden says, to a sinking, owing to the diminution of the anterior tubercles of the corpora quadrigemina which lie below it.

11. The point of the occipital lobe in the rabbit constitutes the cortical centre for the apparatus of vision. This has been confirmed by experiments upon monkeys, cats and dogs, as well as by pathological observations on man.—[*Brain.*

PHYSIOLOGY.

THE RELATION OF NERVES TO PIGMENTED CELLS.—The changes in color induced in the skin of certain animals, such as frogs, snakes and the chameleon, by section of the nerves, or by the direct action of light, are due, as is well known, to contractile changes in the pigmented cells of the integument. These phenomena, striking in themselves, have recently assumed a new interest in view of the possible analogy existing between the movements of their processes and those of the pigmented cells of the retina, which dip down between the rods, as described by Ewald and Kühne. Hence the work of Ehrman [1] possesses an interest wider than that attaching to any simple morphological detail in the structure of the frog. E., by treatment of the skin of the back of the green frog with acetic acid and afterward with

1. Ehrman: Ueber Nervenendigungen in den Pigmentzellen der Froschhaut, *Sitzungsb. d. k. Akad. d. Wissensch. Math.-naturw., Cl.*, 3 Abth., lxxxvi, 167.

gold chloride is able to trace with distinctness the termination of cutaneous nerves in the processes of the pigmented cells. The nerves and cell processes either merge insensibly into one another, or show a sharp line of demarcation by the abrupt termination of the pigment deposit. Such a connection between nerves and the chromatophores has already been shown by Leydig to exist in snakes, but has not been demonstrated before in the frog.

Ayres [2] states that he has recently traced a direct connection between nerve fibres from the ciliary nerves and branches of pigmented cells of the choroid, in the human eye.—[*Jour. Mental and Nervous Diseases.*

THE BONE-CONDUCTION OF SOUND.—In the *New York Medical Journal and Obstetrical Review*, for February, 1882, Dr. J. A. Andrews, Assistant Surgeon to the Manhattan Eye and Ear Hospital, gives an account of his investigations in regard to the intermittent perception of sound, as conveyed through the cranial bones—the observations having been mostly clinical, largely with the use of the tuning-fork. In order that an explanation for the phenomenon of intermittent bone-conduction may be understood, he thus formulates the points in differential diagnosis between an affection of the middle ear and one of the labyrinth, as evidenced by examination with the tuning-fork: 1. If a vibrating tuning-fork, c, be placed between the teeth, the hearing power being normal on one side and diminished on the other, and its tone be intensified in the ear of which the hearing power is diminished, the cause is seated in the external or middle ear, and the labyrinth is unaffected. 2. If the hearing power be impaired in both ears, the sound of the tuning fork be heard better in the worse ear, and intensified on closure of the ear of which the hearing power is most impaired, the cause is still located in the middle ear. 3. If under either of the above mentioned conditions, the vibrations of the tuning-fork be not heard better in that ear of which the hearing power is most impaired, even if its meatus be closed with the finger, and middle ear disease as a cause can be excluded, there is an affection of the central apparatus of hearing. If the tone of the tuning-fork be still intensi-

2. Ayres: Contributions to the pathology of sympathetic inflammation, *Arch. of Opthalmology*, vol. x, No. 3, p. 278, note.

fied by closure of the ear of which the hearing power is least impaired, there is disease of the central apparatus on one side only. Should the sound of the tuning-fork not be intensified by closure of either ear, then the disease is on both sides, and has its seat in the labyrinth or in the brain. In the first and second propositions, the increased resonance results from the reflection of the vibration from the cranial bones upon the nerve. In the third proposition the reflection or condensation of the vibrations of the tuning-fork upon the nerve when the meatus is closed does not intensify their perception, because the function of the auditory nerve itself and not that of the conducting apparatus is impaired. The peculiarity that in some cases of the middle ear disease the watch is not heard by bone conduction, and in other cases examination with the tuning-fork gives the sign of labyrinth disease—*i. e.*, the tuning-fork being heard by bone-conduction better in the ear which is normal as to hearing power, therefore diminished instead of increased in the ear of which the hearing capacity is impaired—cannot, it seems to him, be explained by assuming an interfering with the conduction through the chain of ossicles. He inclines to the belief, based upon experiments, that this phenomenon is due to increased intra-labyrinthine pressure, brought about in those cases of middle ear disease in which there is an accumulation of fluid in the tympanum or the membrana tympani is much depressed, in the former instance by the fluid in the cavity acting upon the oval or round window, or both, in the latter instance by the plate of the stapes being forced against the membrane in the oval window. In both cases the terminations of the acoustic nerve suffer a mechanical irritation which gives rise on the one hand to subjective noises in the ear, and on the other hand annuls the perception of certain tones. Extreme pressure upon these parts may so interfere with intra-labyrinthine vibrations as to completely obliterate bone conduction for the tuning-fork.

PATHOLOGY.

RINDFLEISH ON TUBERCULOSIS.—After all that has been said and written on this subject, we seem little nearer unity than we were some years ago. Does the reason of this lie in the attempted dissociation of clinical medicine and pathology? The results of such a dissociation are seen in the cognate subject of

tumors where clinical history is at least as important as ultimate histological structure. The pathology of tuberculosis must similarly consist, not merely in a histological examination of its ultimate products, but also in the careful tracing of its clinical history.

Tuberculosis, Prof. Rindfleish believes, (*Virchow's Archiv*, 1881, Band lxxxv, pp. 71–83), is undoubtedly an 'infection-disease', but one for which mankind has, to a certain extent, established a tolerance, and which, therefore, appears in its original character only in the case of a person where this tolerance does not exist. Immunity from the outward manifestations of this latently universal disease depends, according to Professor Rindfleish, on good food and a free blood-formation. These failing, tuberculosis becomes evident, and is then handed down by inheritance. The disease shows itself in a characteristic inflammatory process, under which Professor Rindfleish reckons (1) disseminated miliary tuberculosis, the result of the tubercular poison alone, appearing in the form of miliary and submiliary nodules in most of the organs of the body; (2), the more localized miliary tuberculosis, where, in consequence of some local mechanical irritation, the disease appears only in a single organ (lung, brain, peritoneum); (3), localized miliary tuberculosis, where miliary tubercles are developed in the neighborhood of an inflamed centre, ultimately finding their way into the inflamed tissue itself; and (4), inflammatory processes, especially ulceration of chronic course, with little, or perhaps no, local formation of miliary tubercles, but very generally with tuberculosis of lymphatic glands. These inflammations, Professor Rindfleish points out, occur from causes which, in ordinary circumstances, would scarcely produce a passing congestion. The inflammatory product consists, in the first place, in a slow growing deposition, of white blood cells in a connective tissue of the irritated parts. After a time, changes occur. 1. Part of the cells take an epithelioid character, and are termed tubercle cells, being three to five times as large as white blood-cells. 2. Giant-cells are developed which, however, are not to be regarded as characteristic of tubercle. 3. After the aggregations of epithelial cells have produced certain centers in the new growth, there appears a fine granular albuminous substance, either coagulated lymph, or developing zöoglœa masses, which, either separates or

involves in it the epithelial cells. 4. Lastly comes caseation of the inflammatory products owing to defective nutrition. These various peculiarities of the inflammation appear in the differen. forms of tuberculosis enumerated above.—*London Med. Record.*

DISEASE OF SUPRARENAL CAPSULES WITHOUT BRONZING OF THE SKIN.—Dr. Bedford Fenwick said, before the Pathological Society of London, that the specimens were taken from a patient whose illness began about three months before his admission into the London Hospital. There was no pigmentation, but there were marked anæmia, a very feeble pulse, and other systemic symptoms of Addison's disease; the urea in the urine was diminished, and there was a trace of albumen. Addison's disease was diagnosed from the general symptoms. He died somewhat suddenly, of syncope, apparently. *Post mortem*, there was fatty degeneration of the liver, but beyond this no disease of any of the organs, except enlargement and hardening of the suprarenal capsules. The absence of bronzing was the interesting point in the case. He had summarised the cases recorded before the Society during the last fifteen years. He found that in cases where there was no bronzing, the patients died much more rapidly; he was, therefore, inclined to think that there must be a cause at work which attacked two separate organs, or parts of organs. Then the medullary portion of the suprarenal capsules was regarded by the latest observers as a nervous structure, and he attributed the nervous symptoms of Addison's disease to implication of the medullary portion of the suprarenal capsules. Kölliker taught that the outer part of the suprarenal capsule was a blood-vascular gland. Was the bronzing of the skin due to some chemical change in the blood due to disease of this blood-vascular gland-tissue? In the case he now showed he thought that the medullary structure was far more diseased than the cortical; and this seemed to have been the case in other instances in which bronzing did not occur.

The President said that Dr. Fenwick's communication was evidently the outcome of much study devoted to the subject. Addison had noted that the bronzing might not occur in patients who died early in the course of the disease; he had, however, accounted for the fact by supposing that it would have come on had the patient survived.—[*British Medical Journal.*—[*Gaillard's Jour.*

MEDICINE.

THE INFLUENCE OF METEOROLOGICAL CONDITIONS UPON THE CAUSATION OF CROUPOUS PNEUMONIA.—It is a well established fact that the weather, or, to speak more definitely, certain states in the meteorological condition of the atmosphere, have a marked influence upon some of the organic functions of the human body. That this influence is able to cause disease is maintained by some, admitted by a few more, and denied by most authorities.

For some time past Dr. August Seibert, of New York, has been collecting records of the cases of croupous pneumonia brought to the department for diseases of children in the German Dispensary of New York City, with particular reference to the meteorological conditions under which they have developed. His results, published in the *American Journal of the Medical Sciences* for Jan. 1882, show that in 78 per cent. the origin of the disease coincided with a marked fall of the barometer; in 84 per cent. with a minimum temperature of below 50° F.; in 50 per cent. with northerly winds; and in 33½ per cent. with northwesterly winds; in 67 per cent. the velocity of the wind was 15 miles per hour; and these conditions, which seem to favor the development of pneumonia, were accompanied by a condition of high humidity of the atmosphere. His studies are drawn from 600 cases, and his conclusions that the above conditions favor the causation of pneumonia are worthy of consideration.

CASE OF PUERPERAL INFECTION IN A MAN.—G. Lapponi, in *Rivista Clinica di Bologna 1880*, (*Progrès Médical*) after having analyzed and discussed the different theories which have been advanced concerning puerperal septicæmia, the author adopts the one which is generally the most accepted; that is, an infectious disease produced by the absorption of active septicæmic virus, which enters the organism by the pre-existing lesions of the genital canal; at times the virus is formed in the genital canal in a manner peculiar to itself, then again it is imported directly or indirectly from the air.

The following case, new in the annals of science, serves to support this doctrine of the nature and origin of the infection of puerperal women. The city of Pollenza was, in 1876, the scene of an epidemic of puerperal fever. During the month of December, of twenty lying-in women, twelve were attacked with an

identical form of typhoid septicæmia; and of these, seven died on the eighth day. The epidemic was checked by very energetic prophylactic measures. During its continuance M. Lapponi saw the following case; a man, aged 38 years, married at 28. His wife, a multipara was confined in Feb. 1877, and had rigors followed by fever. Notwithstanding this condition the husband had connection with her, during which he felt a keen pain in the bridle of the prepuce; on the evening of the same day he became attacked with fever, and on the day following he had a chill and pain in the groin. The physician diagnosed erysipelas of the penis. The fever increased, and on the fifth day the thermometer registered 40° Cen. The erysipelas spread to the thigh and scrotum. On the seventh day there was asthenia, delirium and a temperature of 40.8° Cen. On the twelfth day there was gangrene of the scrotum, and bursting of an abscess. The patient died on the seventh day by extension of the trouble to the chest.

After a protracted discussion the author arrives at the following conclusions: 1st, there is no difference between puerperal infection and surgical sepitcæmia. 2nd, puerperal septicæmia has nothing specific about it; its puerperal nature does not carry with it any special character. 3rd, the virus does not penetrate indifferently by all the channels, but only by the solutions of continuity of the genital canal. 4th, the infectious matter may remain in the uterus or vagina without injury to the woman.—[*Obstetric Gazette.*

OUTLINE THERAPEUTICS OF CHRONIC ALCOHOLISM.—Dr. C. H. Hughes, says in the *Alienist and Neurologist*:

The following are some thoroughly tested formulæ which I have for the past ten years, quite successfully used; some reformations among pretty well advanced inebriates having, through their aid, been effected.

When called upon to see a person prostrated from a long debauch, the friends or patient desiring to end it, the formula first employed has usually been as follows:

℞ Kali Brom.....ʒ j
Aq. Distill., qs. ft.....ʒ jv
Aq. Ammon., fort.....ʒ ss
Ext. Quassiæ, fld.....ʒ ss
Tr. Capsici.....ʒ iij
Aq. Menth. pip.....ʒ v
Morph. Sulph.....gr. iij

M. S. Tablespoonful every four or six hours during the first few days, well diluted with pepermint or other aromatic water charged with a drop or two of ol. creosoti, or half a drachm of Cherry Laurel water of the Pharmacopœia.

The morpia in this prescription I withdraw so soon as practicable, and substitute cannabis indica and hyosciamus extracts in minimum doses, if anything more actively narcotic than the bromides seems necessary during the day. The one formula, minus the morphia, with gradual diminution of the ammonia and capsicum, has invariably proven to be sufficient, especially if an occasional two-scruple or half-drachm extra dose of the bromide of ammonium or of sodium is given, largely diluted in not less than eight ounces of water.

Hypnotic doses of chloral at night are always given in plenty of water to avoid burning the lips and throat, insure quick absorption and gastric tranquility. Thirty to forty grains given in this way at the patient's usual time for sleep rarely disappoints. One dose of chloral in twenty-four hours is enough.

A hypodermic injection of hyosciamine may be administered in its stead, but the sleep from it in alcoholism, seems not to be so refreshing as that which follows chloral.

The ammonia and capsicum in the formula may be increased till the toper is satisfied from their taste and effects that he is taking something that supplements alcohol and fills the vacuum in the morbidly hungry stomach and nervous system, provided not over forty drops of aq. ammonia are given as a dose. The morphia may likewise be *temporarily* increased without the patient's knowledge of the name of the drug.

The bowels, of course, must be attended to in the beginning.

Every ingredient of the above formula is to be withdrawn in the course of a week or ten days, except the potassic bromide and the bitter extracts, the others being supplemented by pure water.

The precaution is always obseeved of having the patient carry a little of the original formula in his inside vest pocket, to be used on the emergency of a return of the drink craving.

A pungent bitter tonic, and warming to the stomach, and whose after effects are tranquilizing to the nervous system, is the best form of tonic for the toper, and with them, strychnia and the lacto or hypophosphites may be combined at the pleasure of the physician.

ADDISON'S DISEASE.—An interesting contribution to the pathology, of Addison's disease was brought by Goodhart before the last meeting of the Pathological Society, and gave rise to a still more interesting discussion. The cases briefly consisted in atrophy or complete disappearance of the supra-renal capsules, associated with all the clinical features of Addison's disease in a marked degree. It would appear, therefore, that the changes in the capsules which Addison and all subsequent writers have considered essential to the disease may, after all, be only one of several conditions capable of giving rise to this group of symptoms. Many facts were brought forward in support of this opinion. Dr. Goodhart himself was or opinion that such cases as these strongly suggested the view that changes in the abdominal sympathetic were the real source of the symptoms—a view which was traversed by Dr. Pye-Smith, who after pointing out that the adrenals were obsolete organs in adult life, the removal or destruction of which in animals produced no effect, warned his hearers against the acceptance of this neurotic theory, on the ground of its extremely simple and seductive nature. He supplemented this by pointing out that pigmentation of the skin was very common, and there was neither pathological nor physiological analogy in support of melasma being due to nerve-changes. Dr. Coupland was hardly prepared to accept Dr. Pye-Smith's views, and pointed out the striking analogy presented by the vomiting and pigmentation of pregnancy in support of disorder or implication of the abdominal sympathetic. He did not think that structural changes need necessarily be found in the nerve-ganglia themselves, although he had met with one notable example, where fibrosis with atrophy of cells existed. He expressed his belief that the changes in the supra-renal capsules were of the nature of a localized tuberculosis, which might take place without any symptoms of Addison's disease. Dr. C. Creighton, in regard to the function of these bodies referred to the researches which have shown that the blood issuing from the capsules, gave chemical reactions different from those which were obtained from blood entering them, and argued that changes such as atrophy or caseation, which practically cut off the blood-supply, might lead to such alteration in the blood as would bring on pigmentation, while cancerous changes, which increased the circulation through the organs, would have no such effect. Finally, Dr. Fowler referred to a case of lymphade-

noma in which the abdominal sympathetic was largely invaded, where the capsules were healthy, and in which all the symptoms of Addison's disease were presented.—[*Med. Times and Gaz.* —[*Med. News.*

DO PET ANIMALS COMMUNICATE CONTAGIOUS DISEASES?—Dr. William Bunce, of Oberlin, O., sends us a report of the following cases in support of the theory: "Pet Animals may be the Means of Spreading Fatal Diseases." On May 1, 1881, he was called to see a boy four years of age, of German parentage, and one of six children; he was found to have diphtheria. On the following day the youngest daughter, two years of age, presented symptoms of the same disease, and on the next day the father and two more children were attacked. After this date all the other members of the family except the oldest boy, contracted the disease. A thorough examination of the house elicited no source of contagion, but in the barn a cat was found having the characteristic lesions of diphtheria. On inquiry, he ascertained that this cat during its period of sickness had been played with by the children. On August 20, 1881, he saw, with his son Dr. W. C. Bunce, a lady, eighteen years of age, who had diphtheria of a very severe type, which terminated fatally on the third day. In a short time the disease developed in the mother and remaining two daughters. A half-grown cat in the room was found to have well-marked diphtheritic membrane in its throat; it was ascertained that its mother and her four other kittens had been in the same condition. The girls had endeavored to cure the cats by removing the deposit, in this way exposing themselves to the contagious influence of the disease. After the recovery of these cases, and the removal of the diseased animals, the spread of the disease ceased. He thinks it fair, therefore, to conclude that the diseased condition of the cats was the cause of the diphtheritic manifestations in the cases reported. Mention is made of these cases as they are of importance in the consideration of comparative medicine.—[*Medical Record.*

MATERIA MEDICA AND THERAPEUTICS.

NUTRIENT SUPPOSITORIES.—In the *British Medical Journal* of February 19, 1881, is a short description of a plan of rectal feeding which appeared to me to have many advantages over the usual one, of enemata. It is unnecessary to point out the several objections to the latter. My suggestion, based on many experiments, resolved itself into this. Artificially digested meat is mixed with a little wax and starch, and made into a suppository. The practical difficulties of the process were successfully overcome by Mr. Frank Slinger, F. C. S., of the firm of Slinger and Son, of this city (York).

These suppositories are of such a size that the digested and extracted product of twenty ounces of meat from which the insoluble matter is removed, is contained in about five suppositories. The convenience of this method is very great. It is easy for most patients to introduce them themselves; and their use is attended with no discomfort whatever in the majority of cases. After an hour or two the waxy basis is frequently returned, the peptone and extractive being absorbed. In some few cases, owing to irritability of the rectum, the whole suppository has returned; but this can be obviated by the addition of a little opium to each suppository.

I have had excellent results in the use of nutrient suppositories in cases of gastric ulcer, stopping all food by the mouth for a fortnight or so, and ordering the patients to insert a suppository every four hours. Great relief was obtained by the same means, in a case of cirrhosis of the liver, where gastric irritation was a prominent symptom. Several gentlemen have communicated to me notes of cases where equally good results were obtained. Mr. Spurgin, of Maryport, was enabled to prolong the life of an old lady suffering from gastric carcinoma for some weeks after she appeared to be sinking. An immediate improvement took place as regarded the pain, sickness, and prostration, and the patient was enabled to sit up and make her will. Mr. McGill, of Leeds, reports two cases of gastrostomy in the *Lancet* of December 3rd, in which he found the suppositories of the utmost value. Mr. Weeks, of York, has now under his care a case of gastric ulcer, in which they have been retained after carefully administered enemata had returned. It is true that the amount of food administrable in this way is very small, but

every practitioner who has had cases of obstinate vomiting under his care knows how minute a quantity of nutriment will "keep body and soul together" for several weeks or months.—[*London Practitioner.*

THE PHYSIOLOGICAL AND THERAPEUTICAL ACTION OF ERGOT.—In the March number of the *New York Medical Journal and Obstetrical Review*, Dr. Etienne Evetzky, of New York, concludes the publication of Joseph Mather Smith prize essay, on ergot. Although dealing mainly with the physiological and therapeutical actions of the drug, the author gives a comprehensive account of the history of the different varieties of ergot, their botanical relations, their microscopical structure and their chemical composition; the methods of their production, collection, preservation and preparation for medicinal use; the relations of ergot to other remedies, etc. In comparing the action of ergot with that of a number of other excito-motors of the organic muscular tissue, an arbitrary representative, he remarks that strychnia is most closely allied to ergot in its effects, the main difference being that strychnia acts with far greater energy on the spinal motor centers of the voluntary muscular tissue. Digitalis is distinguished by its predominant stimulating action on the heart. The chief difference between the action of ergot and that of Calabar bean lies in the early occurrence of a paretic state of the voluntary motor apparatus after doses of the latter drug that are not quite toxic. Atropia and nitrite of amyl are mentioned as antagonists to ergot. For hypodermic administration we may use the extract, the fluid extract, or sclerotic acid, diluted in water, with or without the addition of glycerine or alcohol, which altter substances the author thinks, do not improve the solution in the least. The solution should always be clear and not too old, and should be made somewhat alkaline if the injections are particularly painful. The solution should invariably be injected into the muscular tissue, and it is well to begin with small doses. The therapeutical applications of ergot are considered under five heads: 1. Disorders of the circulation and diseases of the organs of circulation. 2. Paretic conditions of the organs composed of organic muscular tissue, the circulatory system excepted. 3. Inflammatory and other morbid enlargements and growths. 4. Abnormal secretions. 5. Symptoms referable to the nervous system, and depending chiefly upon circulatory dis-

orders within it. In regard to contra-indications to the use of ergot, it should be used with extreme caution in patients with an enfeebled heart. Pregnancy is an absolute contra-indication. The use of the drug should be suspended during menstruation, unless it is given for some special condition of that function. To avoid disturbing the digestion it is best to give the drug by the rectum or hypodermically. The remainder of the article deals with the special diseases in which ergot seems capable of effecting good results.

ANÆSTHETIC MIXTURES.—The Vienna mixture, with which eight thousand operations have been performed without an accident, consists of ether, 3 parts; chloroform, 1 part. Billroth's favorite anæstheic mixture is chloroform, 3 parts; ether, 1 part; alcohol, 1 part. An English mixture, known as the A. C. E. mixture, consists of alcohol, 1 part; chloroform, 2 parts; ether, 3 parts.

Owing to the different volatility and specific gravity of the various anæsthetic liquids, the vapors have, necessarily, a different composition from that of the mixtures themselves. The value of a mixture must therefore, in part, be determined empirically. Some experiments have been made in the mixing of heart-stimulants with chloroform. Sanford mixed one pound of chloroform with two drachms of amyl nitrite. Others have added oil of turpentine to the chloroform. The objection so far has been that such mixtures cause a headache.—[*Med. Record.*

PERMANGANATE OF POTASH IN SNAKEBITES.—M. de Lacerda has lately discovered a fact of considerable scientific and practical importance, which he has communicated in a note to the Paris Academy, namely, that permanganate of potassium counteracts very effectively the poison of snakes. In a first series of experiments, a water solution of the poison was injected into the cellular tissue of dogs, under the legs, and its usual effects were large swellings, with abscesses, loss of substance, and destruction of tissues. But when an equal quantity of filtered (one per cent.) solution of permanganate of potassium was injected one or two minutes after the poison, these local injuries were quite obviated; there was merely a slight swelling where the syringe had entered. Next, introduction into the veins was tried, and

the permanganate again succeeded admirably. In only two cases out of more than thirty was there failure, and this is attributed to the animals experimented on being very young and weak, and badly fed; also to the antidote bring administered at too long an interval after the poison, when the heart was already tending to stop. In one series of cases the permanganate solution was introduced half a minute after the solution of venom, and the animal operated on showed no derangement beyond a very transient agitation, and acceleration of the heart's action, for a few minutes. In another series, the characteristic troubles caused by the poison, were allowed to manifest themselves (dilatation of the pupil, quick breathing and heart action, contractions, etc.,) before the antidote was applied. In two or three minutes, sometimes five, the troubles disappeared; a slight general prostration followed for fifteen to twenty-five minutes, after which the animal would walk, and even run about, and resume its normal aspect. Other dogs, poisoned similarly, but not receiving the antidote, died more or less quickly.—[*Boston Jour. of Chemistry.*

ANÆSTHETICS FROM A MEDICO-LEGAL POINT OF VIEW.—Dr. J. G. Johnson, of Brooklyn, presents certain conclusions in the *Annals of Anatomy and Surgery*, which deserve careful consideration.

Anæsthetics do stimulate the sexual functions, the ano-genital region being the last to give up its sensitiveness. Charges made by females under the influence of an anæsthetic, should be received as the testimony of an insane person is. It can not be rejected, but the *corpus delicti aliunde* rule should be insisted on. Dentists or surgeons who do not protect themselves by having a third person present, do not merit much sympathy.

Death from administration of chloroform after a felonious assault, unless the wounding were an unmistakably fatal one, reduces the crime of the prisoner from murder to a felonious assault.

The surgeon has no right to use chloroform to detect crime, against the will of the prisoner.

But the army surgeon has the right to use chroroform to detect malingerers.

The medical expert, notwithstanding he is sent by order of court, has no right to administer an anæsthetic against the wish

of a plaintiff, in a personal damage suit, to detect fraud.

Gross violations of the well-known rules of administering anæsthetics, life being lost thereby, will subject the violator to a trial on the charge of manslaughter.

A surgeon allowing an untrained medical student to administer anæsthetics, life being lost thereby, will subject the surgeon himself to a suit for damages. What he does through his agent he does himself.

The physician who administers an anæsthetic should attend to that part of the business and nothing else. He should have examined the heart and lungs beforehand. He should have the patient in the reclining position, with his clothes loose, so as not to interfere with the respiration; should have his rat-tooth forceps, nitrite of amyl and ammonia, and know their uses, and when to use them, and how to perform artificial respiration.

Chloroform cannot be administered by a person who is not expert, to a person who is asleep, without awaking him. Experts themselves, with the utmost care, fail more often than they succeed in chloroforming adults in their sleep.—*Boston Med. and Surg. Jour.*

FORMULA FOR BROMIDIA.—

℞ Potassium bromide, 4 ounces;
Chloral hydrate, 4 ounces;
Ext. hyoscyamus, 16 grains;
Ext. cannabis indica, 16 grains;
Alcohol, 2 ounces;
Water, q. s. to make one pint.

Kelner's Compendium

POWDER IN MIGRAINE.—

℞ Quinidiæ sulphat., gr. xxiv;
Caffeini,
Acidi tartarici, āā gr. xvj;
Morphiæ, gr. viij;
Sacch. alb., ʒijss. M.

Powder, and divide into five equal parts,—one to be taken morning and evening alone or in a cup of coffee without milk. —[*Medical Times.*

SURGERY.

CASE OF FLESHY TUMOR OF UMBILICUS, WITH PATENT URACHUS.—Dr. John Gay French, reports the following in the *London Lancet*:

On June 30th last I saw, in consultation with the late Dr. Bestall, of Oldham, a case which from its rarity, may be placed on record. There was a fleshy tumor of the umbilicus, with a patent urachus, in a female infant aged about six weeks Mr. Bryant, after his extensive practice, states that he saw only one such case, and in it he was not allowed to operate. In our case there was a hernia-like protrusion of skin, of about three-quarters of an inch in length, surmounted by a red fleshy outgrowth, like a swollen and fungoid glans penis. Whenever the child cried or struggled, this growth became very prominent and vascular; and through a small opening, urine was expelled. The aunt (for the mother would not assist at the consultation) stated that the urine constantly flowed from the umbilicus, and that the "lump" was growing rapidly. In order to stop this and close the canal, we advised operative interference, and after pointing out the advantages, dangers, etc., the relatives agreed to place the child unreservedly in our hands. Next day I operated, Dr. Bestall holding the infant and assisting me. Having ascertained that no knuckle of intestine was in the way, a harelip pin was driven through the fleshy mass, at its junction with the cuticle, and transversely with the body axis. Underneath this pin, and at right angles to it, a needle armed with a stout double ligature was passed, and the threads drawn through. These were then tied tightly on each side under the pin, and the tumor was strangulated. Small pads were placed under the pin ends, and a pad of dry lint over all, with a bandage round the body. When examined on the third day the pin and the fleshy mass came away with the lint pad, exhibiting a clean, granulating sore. As the child was crying, it was dressed quickly with zinc ointment, and a pad as before. On the tenth day, when I again saw it, the sore was entirely healed, and covered with cuticle; no urine had passed through it since the day of the operation, and the relatives were much pleased with the result. As a precaution against protrusion, we advised the use for a while of an umbilical truss. Although the treatment was very simple yet the case is very interesting.

OBSTETRICS AND GYNECOLOGY.

A PROLIFIC WOMAN—SEVEN CHILDREN IN TWENTY-SIX MONTHS, FIVE IN LESS THAN ONE YEAR—HEREDITY.—Dr. J. J. Rockwell, of Winesburg, Ohio, gives the following account in the *Ohio Med. Jour.*:

Mrs. G.——, aged twenty-eight, married three years; tall, and rather slender; herself a twin, as also her mother; gave birth to twins January, 1879. They lived a few weeks and died of internal convulsions. March 27th, 1880, she again gave birth to twins. One lived three weeks and the other nine; both dying of convulsions.

March 12th, 1881, she gave birth to *triplets*. I attended her in this confinement. Labor began about noon. I was called about 2. P. M. I found that her health for a month or two before confinement hae been rather delicate; she lost flesh and strength, but had not been confined to her bed. The first child was born at 6 P. M.—vertex presentation. The second was born an hour and a half later; also vertex presentation. The third was born after a similar interval; but by a breech presentation. Labor progressed without requiring any special interference. The uterine contractions were rather vigorous. The placenta, which was single, and rather small, was expelled in about thirty minutes after the birth of the last child. The length of each cord respectively, was twenty-four, twenty and twelve inches. There was but one set of membranes, and very little liquor amnii.

The first child, a boy, weighed seven pounds; the second, a girl, six and one-fourth pounds; and the third, a boy, five and one-half pounds. The third child lived twenty days and died of convulsions. The other two lived about six months and died of cholera infantum. They were bottle-fed.

The mother made a good recovery, but after the death of her child she exposed herself, and died in less than twenty-four hours after she took to her bed.

Reports on Recent Progress in Medicine.

Article LXI.

Reports on Gynæcology. For the Journal. By R. W. Wilcox, M. D. of Vienna, Austria.

Bipartite Vagina.—The case was that of a young married woman who three weeks before had been delivered of a healthy child. During the second stage of the labor some obstacle presented itself which on careful examination proved to be a strong band the breadth of two fingers, lying directly over the presenting head, and extending in the antero-posterior diameter of the outlet of the pelvis. This band was divided and the labor went on normally. At the time of examination the uterus was of the size usual after birth showing no evidences of division as far as could be determined from conjoined examination. On the anterior wall of the vagina, and extending over the anterior lip to the external orifice of the uterus, in the middle line, was a linear elevation, about a centimeter high, easily movable by the finger, and of about the thickness of the true skin. This felt by the finger seemed to be made up of two layers with a slight space between them. The free edge was smooth. On the posterior wall of the vagina, but not involving the posterior lip of the cervix, was a corresponding fold but not so high as the other.

The existence of this condition of the vagina was not suspected previous to its discovery at the time of labor.

Sarcoma Ovarii.—A girl seventeen years old, one year previous, had undergone the operation for the removal of a medium sized tumor of the left ovary, which the microscope demonstrated to be a sarcoma. She made a good recovery and menstruation had been normal in every way since the operation. At that time the other ovary was supposed to be healthy. Her present condition was as follows: general condition good, the only trace of the previous operation was a linear cicatrix extending from

the left of the umbilicus to within nearly five centimeters to the symphysis. Four small cicatrices marked the positions of the deep sutures. The abdomen was enlarged to about the same extent as in an eight months' pregnancy, and on inspection the tumor seemed to be divided into two lobes, the old cicatrix lying in the furrow, the right side being larger than the left. The internal examination showed that the uterus was the size of the usual unimpregnated organ and was completely anteverted. The tumor, as felt from the vagina, was the size of a child's head and almost as hard. Tumor not movable. A small area of tenderness was found to the right side of the uterus. The abdominal parietes apparantly not movable over the tumor. The operation took place on the next day. The incision being about three centimeters to the right of the previous one and extending from a point on a level with the umbilicus to as nearly as possible the symphysis. A few small adhesions were easily torn through by the fingers and the tumor fully exposed. On tapping with the trocar no fluid escaped and a few other adhesions being broken down, the tumor was removed, the pedicle tied and treated with the thermo-cautery. Three masses, one the size of a man's fist, the others smaller were removed from Douglas' pouch, the peritoneum thoroughly cleansed and the wound closed. The deep sutures were of silver wire and fastened with lead plates and perforated shot while the intermediate sutures were of silk. The usual iodoform dressing was applied. During the operation there was considerable hemorrhage from the adhesions, as well as from the abdominal incision. On the following day there was a considerable elevation of temperature, pain the usual symptoms of peritonitis. Death took place about thirty-six hours after the operation. At the autopsy it was found that the intestines were fully inflated. Many adhesions, some presumably old, and about a half liter of thin sanious exudation in the pelvic cavity. The peritoneum was injected and the position formerly occupied by the tumor was apparent, ragged and covered with some thick blood. The lumbar glands on the left side were enlarged, the mass being soft, in the center almost pultaceous, the size of a large kidney, presumably sarcomatous. The glands on the right side but slightly enlarged. All other parts were healthy. The case is remarkable for the great rapidity with which the second ovary became diseased. Another point was the comparative absence of adhesions as com-

pared with the seeming fixation at the examination before the operation.

EXTRA-UTERINE PREGNANCY.—The notes in this case having been mislaid, the report is imperfect. A woman about forty years old had noticed for the last seven years an enlargement of the abdomen. Menstruation had been regular during that time but lately inclined to be profuse. On examination a mass about half the size of a child's head was found in the left half of the pelvis, hard, not tender on pressure and apparently separated by a small interval from the uterus but moved with it. The uterus was carried to the right and but slightly above the normal size. The diagnosis of a pedunculated fibroid of the uterus was made and laparotomy determined upon for its removal. At the operation it was found that the mass was of great hardness and subsequent examination after its removal showed it to be a lithopædion. The woman made a good recovery.

UMBILICAL FISTULA.—The patient a young woman, some two months previous, had been through perimetritis, peritonitis and the rest of the category after childbirth. A month previous to first visit, noticed a discharge from the umbilicus which was generally watery and light in color. Examination showed a fistula at the left and very close to the umbilicus. Edges somewhat puckered and reddened. Probe passed into the sinus five centimeters without meeting any obstruction. Powdered iodoform was dusted on and adhesive plaster applied. At the expiration of two weeks the discharge had ceased and the orifice was contracting. No pain or other symptoms connected with the previous history.

INTRA-UTERINE INJECTION APPARATUS.—This consists of an instrument with a double curve like an old fashioned Sim's catheter. The uterine portion is hollow, the end solid and rounded and at the sides two large rectangular fenestræ, at the bottom in a round orifice. The remaining portion is a double curved aqui which enters the uterine portion and extends nearly to the rounded end. It is thought that the fluid being injected, by a syringe in connection, through the inner tube will come in contact with the uterine cavity through the two fenestræ and the surplus will readily pass between the inner and outer tube and

away by the round orifice above mentioned. The material is silver but in actual practice undoubtedly hard rubber would be preferred. As far as can be seen this apparatus aught to diminish the danger of fluid being left behind in the uterus to a minimum.

Artical XLII.

Report on Dermatology. By A. H. Ohmann-Dumesnil, A. M., M. D., of St. Louis.

Vaccination for Erysipelas and Eczema.—Dr. S. H. Moore, of Buffalo, N. Y., writing to the *Physicians and Surgeons Investigator* says, "During the past fifteen years I have always resorted to vaccination for the cure of salt rheum (eczema?) and erysipelas and when the vaccine *virus* has worked, I have never failed to permanently cure my patient of either *salt rheum* or erysipelas." It seems rather a strange procedure to vaccinate a patient for erysipelas,and we must congratulate Dr. Moore upon his escape from any serious complications. We would not be willing to advise our readers to pursue such a course. Besides, we must accuse the gentleman of obscurity in not acquainting us with the particular variety, if any, for which he claims the efficacy of vaccine virus.

As to eczema being cured by this process it seems to be more of a *post hoc* argument than a reliable one. Those having a large experience in this disease, have not met with any success with this method or at least, not such as to warrant the assertion which we see given above. Dr. G. Behrend, of Berlin, reported a case before the International Medical Congress, in which eczema was aggravated by vaccination. It may be that there was perhaps some slight error in diagnosis, or that other treatment operated cures generously attributed to the vaccination.

Comedones.—Unna, in *Virchwo's Archives*, recommends the following for comedones: Kaolin, 4 parts; glycerine, 3 parts; acetic acid, 2 parts, with or without the addition of a small quantity of some etherial oil. With this pomade he covers the

parts affected, in the evening, and if need be during the day. After several days all the comedones can be easily expressed, most of them coming out by washing the parts with pumice stone soap. He reports uniform success from the use of this method.

The rationale is based upon the view that the comedones are not produced by an accumulation of particles of dust or dirt, but by pigmentary matter which is soluble in acids. It is a well-known fact that comedones which accompany acne, appear not only upon persons exposed to dust or careless of their persons, but also on chlorotic young girls in good circumstances. Besides, the discoloration not only exists on the surface of old comedones, but always descends to the lower parts.

The same results as those obtained by the use of the above mixture, can be secured by bandaging the affected parts for a long time with vinegar, lemon juice or dilute hydrochloric acid. The author concludes by saying that the acids act like cosmetics transforming the black color into a brown or yellow shade, and destroying it gradually altogether. They also produce a quicker desquamation of the horny bed which interrupts the exit of the comedones, and brings to the surface the glandular openings.

NITS IN THE HAIR.—The following methods are given in the *London Lancet*, for the removal of nits from the hair:

1. Freely apply spirits of wine, so as to dissolve the glutinous substance attaching the nits to the hair, and then wash them away with soap and water.

2. Apply to the hair a rather strong decoction of larkspur seeds (Delphinium staphisagria). This quickly kills the parasites. Next wash the head, after two or three days, with carbolic soap. The nits will then readily come away by brushing and combing.

INTERTRIGO INFANTUM.—Dr. Klamann gives in the *Deutsche Medizinal-Zeitung*, the formula for a drying powder which he claims is not attended with many of the conveniences of those in use. He claims that erythema and eczema which occur in children in the folds of the neck, vaginal folds and about the scrotum aud nates quickly yield to the action of the powder. He has also seen a good effect follow its application to a seborrhœa

capitis in a child continually scratching its scalp. It is also good as a drying powder for skin wounds. The formula is as follows:

℞ Magnesiæ ust. subt. pulv.....5.0 grammes.
Talci Venet. pulv.....20.0 grammes.
Acid Salicylic..... 0.2 grammes.
Mist. olos. balsam..... gtt x.

M. Ft. Pulv. Sig. Apply as deemed necessary. If any indications for it should exist, burnt alum may be added to the above. The magnesia is added to the talc to render the powder less dusty and slippery. The author is opposed to vegetable powders on account of their liability to decomposition and metallic powders he declares entirely non-indicated and positively injurious.

ELEPHANTIASIS OF PREPUCE OF CLITORIS.—A rare case of this affection occurring in Prof. Rockitansky's clinic is mentioned in the *Obstetric Gzette*. The patient was the mother of eight children, and three months advanced in pregnancy. The affection commenced four years ago, and by its size and sensitiveness her great inconvenience in sitting. The lesser labium of the right side was involved in the mass, which had a circumference of 36 centimetres; and its weight nearly 500 grammes. It was removed with no untoward symptoms, there being no bleeding.

IODOFORM IN DISEASES OF THE SKIN.—Mr. Frazer (*British Med. Journal*) has obtained very favorable results from the use of iodoform in various diseases of the skin. It may be readily employed in the form of an ointment of any required strength, mixed with either lard or vaseline. The strength of the ointment made use of, has ranged usually ten to thirty grains of iodoform to the ounce of cerate, but double this strength can be employed. He claims that it has proved a most useful remedy for the local eczematous eruptions occurring in strumous children and young people, as well as in cases of impetigo. He calls attention to its curative effects in porrigo decalvans. He first applies vesicating collodion over the affected spot and around it for a short distance, having taken care to epilate all the diseased hair over the spot. When the blister begins healing, the iodoform ointment is applied night and morning, or even oftener. In a very short time the hair reappears in a healthy state.

BICHROMATE OF POTASSIUM IN SYPHILIS.—Dr. Arfal has published in the *Union Medical* of Arragon, an article showing the good effects of the above remedy. The dose is one centigramme, in small pills, three times a day. The patients feel improved in a few days, and in a fortnight the improvement is more marked, especially the iritis, which the author says is often produced by patients conveying the infectious matter to their eyes by means of the fingers.

The medicine is enclosed in small pills of tobacco and produces heat of the stomach and secretion of the saliva. There is a diminution of heat and of the pulse and an increase of the urine, which as a rule, assumes a deep red color.

AINHUM.—HISTOLOGY AND PATHOLOGY.—M. Suchard gives the result of his microscopic examination of this lesion in *le Progrès Médical* of Feb. 11, 1882. The specimen was the thumb from a child, a native of the Isle of Pines. The disease in this member was in a comparatively early stage, the furrow being 1 mm. deep. Longitudinal and transverse sections were made, the thumb being first treated in alcohol, decalcified with picric acid and hardened with gum and alcohol. The sections were colored with picro-carminate of ammonia and preserved in glycerine.

The author found no vascular nor vervous lesions, but a profound alteration of the connective tissue, derma and sub-jacent structures.

On a level with the furrow the derma is considerably modified. Opposite the furrow may be noticed a bundle of dense connective tissue cut across, which is more marked as it approaches the median plane. Here it is limited by two longitudinal bands of connective tissue. Laterally, however, and in proportion to the increase of distance from the median plane, it becomes less marked and is lost in the derma.

The fibrous bundle is stretched transversely across the furrow; its maximum thickness is on a level with the median line. No yellow elastic fibres can be found in it.

The sweat glands which are very abundant in the pulp of the thumb, are noticed to have been separated by the development of the fibrous tissue, and have comptetely disappeared where this fibrous tissue is in greatest quantity.

The papillæ have disappeared in the lowest parts of the fur-

row, laterally; some are flattened, others elongated. At other points of the pulp of the thumb they are normal.

That part of the thumb only, which is beyond the furrow, has been noticed as being affected with a beginning of fatty degeneration. This is probably due to the fact that the part observed was not sufficiently implicated to have had its circulation cut off and fatty degeneration fully established.

The fibrous bundle, noted above, seems to play a very important part in the evolution of the lesion. It is disposed in the form of a semi-circle in the deep parts of the skin and in the same plane as the furrow. It seems to retract like a cicatricial band and this being slow but constant, it exercises a marked influence upon the adjacent parts, both superficial and profound.

The derma is replaced, in part, by the new tissue and is dragged downwards, its papillæ being effaced and tending to disappear, being flattened in the effort to cover a curved surface larger than the level surface of the normal skin.

As to the deeper parts, they are necessarily compressed between the resisting bone and the fibrous semi-circle which cuts off vascular and nervous supply and ends, after a time, in fatty degeneration the distal part ultimately dropping off.

Clinical Reports from Private Practice.

Article LXIII.

PURPURA HEMORRHAGICA. By T. HODGE JONES, M. D., of Lamar, Missouri.

On the evening of Dec. 27, 1881, Mr. M. P. Leonard a farmer living in Barton County, Missouri. showed me a son of his, some eleven years old, who was convalescing a typhoid fever, but had been feeling, " not so well," the last few days.

In making a hurried examination I discovered a few purple spots on the dorsal part of the hand; asked the mother and father if they had noticed them, and if there were on other portions of the body, such appearances? No former notice had been taken of them; and at once the mother bared her son's back and arms, on which were scattered many spots, some of a size comparable to a silver dime, but the greater number were much smaller. The boy's face was œdematous and sallow, his abdomen rather full, but no other evidences of effusion were apparent. Circumstances compelled me to make a hasty prescription as follows:

℞. Lactopeptine.....3j.
Hydrastis Can. Pulv.....grs. xx.
Ipecac.....grs. x.
Podophyllin.....grs. v.

M. Chart. No. XX, Sig. One every three or four hours in daytime.

No more was heard of this case until two days later, Dec. 29, when I was requested to see the patient, who was then some sixteen miles from my office, which circumstance prevented my making many observations, that would have been of interest in this case.

I found the boy in bed, his face besmeared with blood-stains his nostrils packed with coagula and the blood wasting out about the impacted masses. His gums were puffy and pale, the blood oozing from around his teeth and tonsils.

He occasionally voumited blood, his stools were black and of

a jelly consistence, evidently containing great quantities of clotted blood. His urine was mingled with blood streaks, but normal in quantity.

Wherever the blood collected, it coagulated readily. His circulation was 103, temperature 101½° the respiratory movements, like that of languor, with occasional sighs, yet not much oppressed.

The extremities were warm and little more ecchymosed than when first examined. His appetite good, but the stomach could, not retain food long, probably on account of the accumulation of blood in it. The bowls moved seemingly from irritation, caused by the presence of coagulum. After directing the parents to use all caution, against any great exertion on the part of the patient, and telling them to allow small quantities of any food the child might relish; I prescribed, (The tinctures used were all the "Specific tinctures," of Thorp & Lloyd Brothers of Cincinnati, Ohio.)

℞ Tinct. Hammamelis Virg.....ℨiij.
Tinct. Belladonna Atr.....ℨij.
Tinct. Ergotæ.....ℨj
Glycerini
Spts. Frumenti aa q. s. ad.....ℨiv

M. Sig. Half teaspoonful every two hours. Also continuedt he first prescription with the addition of about three grains of Carbo Ligni to each dose of the powder. Ordered Inunction of

℞. Adipis.....ℨij.
Spts. Camphor.....ℨj.
Spts.Terebenth.....ℨij.
Quiniæ Sulphat. .....ℨj.

M. Sig. Rub over the stomach, chest, under the arms and along the spine, often enough to keep oily. My next visit was on Jan. 4th. 1882; found the patient very little different in any way, except all the symptoms were much aggravated. The coagula were of a semi-organized aspect, being a grayish transparent color and of tough consistence, taking shape from the part or pocket containing them; and could be lifted out of the mouth, from around the teeth, under the tongue and about the lips in portions the exact counterpart of the cavity from which they were taken. In addition to the enumerated symptoms, the boy at times had, what the parents called "fits," in which the boy was forced backward and the legs set in violent motion, the patient at same time exclaiming, "kick, kick kick," as fast as he could speak it.

The spasm lasted some three minutes, when it passed off and the boy knew nothing of what had taken place during his fit, but was weakened and inclined to sleep. The parents were informed of the danger their boy was in, and advised to be ready for any emergency.

The circulation at this time was 130 per minute, of rather soft prolonged feel under the fingers, easily compressed and the flow uneven. The respirations were irregular and short, about 47 per minute. The temperature 103½,° bowels passive and somewhat swollen, sodden and tender. His countenance expressed anxiety, the feet were inclined to get cold, and his hands were busy pulling the lumps and ropes of coagulum from his mouth, and he spread them out on the bed and seemed to carefully examine them.

I knew not what to do. The drugs I had with me, were all within fifteen miles of us, and the roads almost impassable. "The boy will die" I said, "but it behooves me as the chosen physician to do all within my means for his relief." Prescribed,

℞. Tinct. Aconit. Rad.....gtt. xxx.
Tinct. Belladonæ Atr.....gtt. xx.
Tinct. Hammamelis, Virg.....℥ij
Acid Muriatic.....℥ss,
Glycerini
Spts. Frumenti aa q. s. ad.....℥iv.

M. Sig. One teaspoonful each four hours in alternation with

℞. Hydrat. Chloral,.....℥iij.
Fld. Hydrastis,.....℥ij,
Tinct. Ergot,.....℥j.
Syrupi Aurant. Cort.
Spts. Frumenti aa q. s. ad.....℥iv.

M. Sig. Teaspoonful each four hours between the other doses. Ordered the inunction kept up, and took my departure.

The sixth day of January an uncle of the boy came to my office and reported that "some thought the patient better," the convulsions had been less frequent for a season. The uncle knew but little to relate, and could throw no light upon the dark picture we have before us. My last prescriptions were substantially renewed and nothing added except the powder he had previously been taking with charcoal; one every time the chloral mixture was given and in with it. The dangerous character of the disorder was again explained and the uncle warned not to hope too much, for the boy must come near unto death, if he recovered at all. The patient died Jan. 7th. 1882.

I have had but little experience with such cases and endeavored to adopt the same plan of treatment in this, that I do in any disordered condition of the system, or any part of it. That is, discover the lesion and meet the indication. Here it appeared to me, the blood-vessels were relaxed in the capillary system throughout, so as to allow oozing and extravasation of blood among the tissues and under the skin More particularly does this seem the case with all the mucous surfaces, which owing to their peculiar formation allow the blood to escape and waste, producing the frightfully bloody sight we beheld in our patient.

Not only, at and near the surface, does the hemorrhage occur, but wherever the capillaries ramify it is found in diffused blotches or spots. Hence, throughout the whole circulatory system the vice occurs

In short, there seems to exist a universal perversion of nutrition. The blood making apparatus and the machinery to circulate it are weakened, a "general hemorrhagic disposition prevails," and the life substance of our patient's body wastes and leaks out before our eyes, until death comes, as a merciful measure to his relief.

Article LXIV.

Genital Irritation. By W. B. Craig, M. D., of St. Joseph, Missouri.

The Societies of the east have been considerably agitated over the discussion of "Genital Irritation," and from time to time the journals have been full of the subject.

This matter has been so fully discussed, that for me to defend, if it were possible, one side or the other, would be tautological to say the least. Still, I can not but object to what, to my mind, seems a rather theoretical and dogmatic turn this argument has assumed on the part of some worthy gentleman.

We must admit the fallacy of the so-called "Reflex Action" of the nervous system to make the one position tenable, and revolutionize our theories completely of this system, or candidly acknowledge facts as the true exponents of pathological conditions.

Now, to deny that testimony is wanting to prove that irritation of the genital apparatus is almost always followed in a short time by muscular incoördination, hysteria, hypochondria, epilepsy and other convulsive seizures, is wrong, especially as the experience of honest, intelligent surgeons proves the contrary. Theory is one thing, practice another, no matter how the results of such practice are explained, whether it be through "shock" to the nervous apparatus, or the removal of nervous irritation by liberating an imprisoned glans penis and removal of hardened smegma.

Not wishing to theorize if capable, or attempting an exhaustive essay, I shall briefly refer to a few cases of nervous disorders, produced by phymosis and strictured meatus, cured by circumcision and urethrotomy. I shall make few or no comments upon them, thus leaving the matter to rest purely upon its merits.

Case 1. Medical student, aet. 27. Visited me four years ago, complaining of palpitation of heart, smothering and hot sensations, in fact, he was hypochondriacal and thus unable to attend

the course of lectures then in progress, and fell considerably behind in his classes; an examination disclosed a tight foreskin which had never been fully retracted to his knowledge. For cleanliness he would inject the pouch of the prepuce with antiseptics, then retract the covering of glans and dry the surfaces which often were herpetic. The glans was small, conical and shriveled, the meatus, red, swollen and sensitive.

Performed circumsision and in six weeks the patient was fully recovered and graduated the following term with credit.

CASE II. Child aet. 2½ years. Family physician had been called to relieve it of a crowing respiration and other spasmodic symptoms referable to the throat and chest. Antispasmodics failing to accomplish the desired end, an examination of the genital organs was suggested, and revealed a tight prepuce; and it was further noticed that the penis was in a condition of almost constant priapism, an orgasm being produced by the slightest contact with hand or clothing.

I circumcised this child, and immediately this "laryngismus stridulus" disappeared. The boy has never known an hour's sickness since this, two years ago.

CASE III. A clinical patient, child aged three years. History, the grandmother who almost constantly nursed him, handled the penis, until it became so irritable that the naturally long and tight foreskin became adherent to the glans and its ostium closed by inflammatory deposits, so that the mother opened it with a pair of scissors, when an effort at micturition was made, and kept it pervious by the daily introduction of a large needle. The boy was nervous, irritable and anæmic. Muscular incoördination well marked, especially upon lower extremity. The prepuce was drawn still further forward and removed with scissors, the penis being erect although the child was etherized.

The mucous layer of foreskin was pulled from the glans with thumb-nail to the corona, behind which was found a considerable collection of inspissated smegma. No sutures were used. The wound was dressed with a greasy cloth and healed by first intention. Result, *complete relief.*

CASE IV. Young man aet. 18, visited me for a suspicious sore upon right lip of meatus urinarius, he also had a tight foreskin. The sore proved a specific one and treatment was imme-

diatealy resorted to, and two years afterward was apparently well. He then became morose, hypochondriacal and almost a confirmed melancholic, though formerly of a very cheerful temperament.

I suggested circumcision, (there being no dyspeptic symptoms) to which he gladly consented, and following up this advice, I also found a preternaturally small meatus. This I incised at the time of slitting up the prepuce. Since the operation he has gradually improved, until now he has regained his mental equilibrium and is a grateful man for this treatment; only regretting it could not have been resorted to some years ago, which in all human probability would have prevented the inoculation of this, then red, irritated, swollen meatus.

CASES V.—VI.—VII. All young men who were circumcised for short, narrow foreskin, which gave great pain during intercourse, and much vesical neuralgia as well as mental disquietude. Result, all that could be expected.

CASE VIII. Geo. G., age 30. Widower, two children; has had syphilis some years ago. No traces at present, March 1879. He has a close prepuce, a small, conical glans, irritable meatus. Suffers from neuralgia in various parts of the body, in bladder, rectum and thighs. Is melancholy and haggard, has vertigo also. I advised operation, to which he willingly consented. He has retured frequently and expresses himself as entirely relieved and happy. He is contemplating another *better half.*

I could report other cases of equal severity and importance, but I do not wish to occupy more time or space. Enough has been adduced to put the matter beyond a reasonable question or doubt to any candid mind, and statistics might be heaped higher than vision reaches and yet skepticism would plead "Facts are wanting."

What is noticeable in these cases is that no other cause could be assigned for these conditions of the mind and nervous system, excepting two who had syphilis, but neither one seemed annoyed in the least in this respect as they were "over their scare" and well. Again, the recovery from alarming and dangerous conditions was so immediate and striking that I was forced beyond a question to admit the relation of cause to effect, and to establish in these cases and their relief by surgery a veritable *post hoc, propter hoc.*

Article LXV.

Monocular Exophthalmos. By S. Pollak, M. D., Surgeon to the Eye and Ear Infirmary of the St. Louis Hospital, St. Louis.

A girl of fourteen years, weighing 140 pounds, fully matured, robust and hardy, of very quiet, modest demeanor, and of industrious habits, has, for the last two years, perceived a gradual protrusion of the right eye, which, however, has not caused her the least inconvenience; indeed, but for its disfiugur-ing effect, neither she nor others would have scarcely noticed it. Her parents and teacher became at last anxious on account of the recent rapid progress of the protrusion, and they determined to seek medical advice.

The following are the notes of my "clinical record":

A beautiful clear blue eye is seen to protrude from its orbit; its displacement is in a vertical line, the upper line of the right eye being on a level with the lower border of the left eye. The bulb is nearly entirely out of its socket, and rests upon the zygoma. Mobility, however, is *not* impaired. With a proper effort, the eye can be retracted within the orbit, permitting closure of the lids, but will drop out and down, when the strain is relaxed. The media are clear, the pupil responsive to light. The fundus normal, except slight hyperæmia and œdema of the optic papilla. Vision is like that of the left eye, good, ($\frac{20}{20}$), accommodation normal.

She has had no pain, no vertigo until recently when she noticed at rare intervals, slight circumorbital shooting pains. There is no hypertrophy of the thyroid gland. Basedow's disease (exophthalmic goitre) must be excluded at once; this is moreover a bilateral affection, while this girl is effected only in one eye. Neither are there any cardiac murmurs or palpitations, which characterize exophthalmic goitre.

Exophthalmos may be produced by tumors, solid or fluid, by hypertrophy of the deep orbital fat cushion, etc., and by developing growth of the peri-orbital osseous cavities. Aneurismal

tumors may also cause exophthalmos, but the total absence of a bruit and pulsation in the cranium excluded this hypothesis.

Examination determines the presence of a firm resistent body of a bony character, on the superior and external margin of the right orbit developed downwards to a point about half an inch below the line of the other brow. This tuberous growth seems to be proliferative in character, *i. e.*, a *hyperostosis*; the pressure due to its bulk, crowding down the eye, and giving unnatura- prominence to the supraorbital ridge.

The lachrymal gland can be distinctly felt underneath. There is also a considerable osseous prominence on the squamous portion of the right temporal bone of the size and form of a silver fifty cents piece painless on pressure. It is quite probable, that this hyperostosis involves the entire upper plate of the orbit, thus narrowing its cavity and crowding the eyeball out and down. The girl's ability to retract the ocular bulb into the orbital cavity *at will*, is probably the result of an unusual and conjoint effort of all four recti muscles, strong enough to compress the softer tissues within; their elasticity expels the eye again, as soon as the voluntary contraction of the recti muscles ceases.

It is not probable, that the hyperostosis encroaches upon the cavity of the calvarium; it is more probably limited to the interspace existing between the tables of the frontal, malar and temporal bones.

While I discerned only hyperæmia and œdema of the optic disc another observer thought he detected an optic neuritis. A true neuro-retinitis can only result from the encroachment of a tumor upon the sheath of the optic nerve, which is incompatible with good vision (?). Optic neuritis is due either to cerebral disease, to a true inflammation of the vasomotor nerves (?); or it may originate in mere hyperæmia caused by venous stasis (?). Compression of the veins does not produce choked disc, but only hyperæmia and œdema. Vision is not necessarily much disturbed thereby. In our patient's case, the fact that the brain is still free from inflammation, accounts for the absence of all disturbances of accommodation. But the recent more rapid development of the tumefaction on the squamous portion of the temporal bone, forebodes no good result. It is believed to be *malignant* tumor of the bone.

As the patient resides in a remote county, and is unwilling and unable to remain under observation, no therapeutic measures could be adopted. The careful and persistent use of a solution of arsenite of potassa was suggested.

Editorial.

Article LXVI.

"The College for Medical Practitioners."

This is an institution *sui generis*. There exists no other such medical school in the world. Its name—the caption of this article—plainly indicates its object. It is "the establishment of a College at which Medical Practitioners may review their Collegiate Courses and receive instruction in current advances of the several branches of Medicine and Surgery and the Specialties connected therewith."

In connection with the College there will be Clinics for Diseases of the Eye; Diseases of the Nose, Throat and Ears; Diseases of the Digestive Organs; Diseases of the Genito-Urinary Organs and the Rectum; Diseases and Deformities of Children; Diseases of Women, and in general, every department which engages the interest of every practitioner of medicine. There will also be Dissecting Rooms and Laboratories. The latter will contain every apparatus that is required to facilitate the imparting of practical knowledge to medical practitioners.

During the last eleven years we have had the pleasure of meeting, as a private instructor, a large number of medical men, who temporarily suspended practice to become better acquainted with some one or several of—what seemed to them—the more important branches of medicine. From their often expressed wants, and from semi-suggestions made by many of them during the last several years, a plan for an Advance Medical College slowly took a definite form; but not until February last, were any steps taken to put the plan into effect.

Those who have scanned the Catalogues issued from the Medical Colleges during the last five or seven years, must have noticed the large and continually increasing number of medical practitioners who are availing themselves of the great advant ages arising from a more thorough knowledge in several departments of medicine and surgery.

To make sure that we were not too far in advance of the times, or led astray by what seemed to us to be a very decided "want," that must have long been felt by many practitioners, we wrote letters to a large number of *well-known* physicians residing in this and adjoining States, concerning the possible need and success of such an institution as the one contemplated. From each of whom we received such encouragement, that our enthusiasm, which we feared was too great, was made still greater. No one will read these letters without appreciating the need of a "COLLEGE FOR MEDICAL PRACTITIONERS." The following are some of their expressions on this point: "It will be a great convenience to the country practitioner." "You may count me as one of your most attentive students." "Why did you not think of this before?" "That's business; it will pay you and those who go to hear you." "I am very sure you have invented a method of education that will become very popular and profitable." "It is a desideratum." "We have enough Colleges to make doctors, but we sorely need a College to improve those already made." "I am pleased with the idea, as the want of such privileges have always been felt by general practitioners." "Your method of teaching is a good one; I am sure you will be successful." "Knowing several of your associates in your enterprise, as well as yourself by reputation, I feel quite sanguine of your success." And so on in almost every letter. To give all of them would fill several pages in the JOURNAL.

The want of a "COLLEGE FOR MEDICAL PRACTITIONERS," is not only felt in the West, but in the East as well, as is plainly indicated by the following extract from an Editorial in the N. Y. *Med. Record* of March 25th:

"There is hardly a progressive medical man away from the centres who does not at some time or other hope for an opportunity to live over the general experiences of his more active student life; to study disease in the hospital ward; to perfect himself in diagnosis; to make sure of physical signs; to brush up on his surgical anatomy; to look through his microscope over the shoulder of the pathologist; to witness operations by the hospital surgeons—in fact, to be more or less directly in communciation with the advanced thinkers and workers of his day.

"As a rule, such gentlemen who visit the larger cities are *earn-*

est men, * faithful workers, and determined students. No one must doubt that they are not willing to do to the uttermost whatever can be done to render their stay from business and home as profitable as possible. In this connection it becomes our medical teachers to ask themselves the question whether or no the *facilities which are afforded these willing and ambitious workers are what they should be.* We think it must be answered in the *negative.* It is true that there are occasionally given special courses of instruction in different branches, but these generally are little more than *spasmodic efforts* and so far as meeting the general demand for post-graduate instructions, practically *amount to nothing.* There is nothing left for the medical man but attendance upon some one of the medical colleges, and the taking of what he needs from the general course. Comparatively speaking, he obtains *very little.* He does not expect to go over the fundamental branches as a student, and consequently, PRECIOUS TIME IS LOST, which by some proper system of study might be thoroughly utilized. He may visit the college clinics, the hospital wards, or occasionally listen to a didactic lecture, but in all this he necessarily feels that he is treated MORE AS A FIRST-COURSE *student than as a man whose serious business it is to perfect himself in the* HIGHER BRANCHES of his calling. All this seems to our mind to prove the necessity for the better development of post-graduate courses. Instead of the latter being merely supplementary to the ordinary college course, as at present, they should be *entirely distinct* and independent, and every effort should be made to systematize the advanced studies belonging to such a course, in a manner to properly economize the time of stay in the city and to thoroughly utilize the numerous opportunities for clinical instruction which abound in the great cities. Indeed, there is no reason why SPECIAL ADVANCED SCHOOLS should not be created for the purpose. We are sure if properly managed, that they would be thoroughly successful."

As many of our readers may be interested in knowing more of this institution, we may, if perfected, give its complete working plan in the next issue.

Dr. Hooper, Little Rock, Ark., in the absence of Dr. Woodard, who is now in Europe, will preside at the American Medical Association at St. Paul, next June.

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* Italicized and capitalized by the Editor.

Book Reviews.

Article LXVII.

Development of Rectal Cancer. (With plates) by W. Harrison Cripps, F. R. C. S. (Reprinted from *Transactions of the Pathological Society of London*, for 1881.)

This reprint, for which we embrace this opportunity of thanking the author, is a pamphlet of twenty-five pages, illustrated by ten full page lithographic plates. It is for the most part explanatory of a series of microscopic specimens illustrating the pathology of malignant rectal disease, but contains, nevertheless, a good resumé of the clinical differentiation between malignant and benign neoplasms of the rectum to make the contribution of no mean value to those who are not habitual workers with the microscope.

The author is a believer in neither mechanical irritation or obstruction as a cause of malignant growths, nor does he consider that inherited predisposition can stand the test of critical inquiry, but suggests rather that the cellular collection which we designate cancer, is due to specific irritation. Although the exact nature of the irritant infecting the cells is unknown, it would appear to be from some cause external to the body, having a special affinity for certain structures. The irritant finds its way into the blood by absorption and whilst in the vessels is incapable of multiplying or doing harm; but when it becomes stationary by extravasation into the tissues as the result of a blow, for instance, it immediately becomes active. Although no parasites have as yet been discovered by the microscope, yet the myriads of minute specks of granular material seen when examining a section of malignant disease might contain any amount of organisms which, at present, are incapable of recognition.

This is briefly stated the theory suggested. In support of this theory of specific contagion, auto-inoculation of cancer by constant contact is adduced. The experiments to ascertain the inoculability of malignant growths which have hitherto been made, have failed because, as the author thinks, the material was inserted *beneath* the skin and he suggests that we have reason to believe that more than negative results would be obtained if portions of the disease were kept sufficiently long in contact with an *epithelial* structure. He saw such an experiment carried out by nature in a woman who had a large cancerous ulceration involving the breast and the skin of the thorax. Being unable to wear

any dress, she kept her left arm bent at a right angle in constant contact with the disease. This resulted in a large cancerous ulcer several inches in diameter in the neighborhood of the elbow which was in contact with the disease of the thorax.

The great role which micro organisms play at the present time in surgical diseases may account to some extent for the theory, advanced, but as yet no conclusive evidence has been offered for its demonstration and it is to such men as Cripps, who have more than the average opportunity for examining malignant growths in their various stages of development, that the profession looks to for the solution of intricate problems such as the cause of malignant neoplasms. FRANK J. LUTZ.

WOOD'S LIBRARY OF STANDARD MEDICAL AUTHORS FOR 1881, Published by Wm. Wood & Co., New York:

1. A TIFICIAL ANÆSTHESIA AND ANÆSTHETICS. By HENRY LYMAN, A. M., M. D. 8vo., pp. 338.
2. COULSON ON THE DISEASES OF THE BLADDER AND PROSTATE GLAND. Sixth Edition revised.
3. A TREATISE ON FOOD AND DIETETICS, Physiologically and Therapeutically Considered. By F. W. PAVY, M. D. Second Edition, 8vo., pp. 402.
4. A HANDBOOK OF UTERINE THERAPEUTICS, and of Diseases of Women. By EDWARD JOHN TILT, M. D. Fourth Edition, 8vo., pp. 328.
5. A TREATISE ON ALBUMINURIA. By W. HOWSHIP DICKINSON, M. D. Cantab, Second Edition, 8vo., pp. 308.
6. A TREATISE ON THE MATERIA MEDICA AND THERAPEUTICS OF THE SKIN. By HENRY G. PIFFARD, A. M., M. D. 8vo., pp. 351.
7. A TREATISE ON DISEASES OF THE JOINTS. By RICHARD BARWELL, F. R. C. S. Illustrated by numerous engravings on wood. Second Edition revised and enlarged. 8vo., pp. 462.
8. A TREATISE ON THE CONTINUED FEVERS. By JAMES C. WILSON M. D., with an introduction by G. M. DA COSTA, M. D. 8vo., pp. 365.
9. A MEDICAL FORMULARY BASED ON THE UNITED STATES AND BRITISH PHARMACOPŒIAS, together with numerous French, German and Unofficinal Preparations. By LAWRENCE JOHNSON, A. M., M. D. 8vo., pp. 402.

10. CLINICAL LECTURES ON THE DISEASES OF OLD AGE. By J. M. CHARCOT, M. D. Translated by LEIGH H. HUNT, B. Sc., M. D., with additional lectures by ALFRED L. LOOMIS, M. D. 8vo., pp. 280.

11. A TREATISE ON THE DISEASES OF THE EYE. By HENRY D. NOYES, A. M., M. D. 8vo., pp. 360.

Wood's Library for 1881, exceeded the anticipations which had been formed from the general excellence it had attained in 1880. The authors selected have been of the first order, and selected with the greatest care. The works are such that the price asked for them seems almost fabulous for its cheapness. How any wide-awake and intelligent physician who attemps to keep abreast of the times, in medical matters, can dispense with this cheap, valuable and elegant collection, we cannot understand and we can hardly imagine such to be the case. The binding of the Library for 1881, and its typography, present a neater and cleaner appearance and the books are such as to make a very nice display on a physician's book-shelves.

1. Anæsthesia and anæsthetics may yet be considered but in their infancy and on that account all that pertains to them is interesting. The book before us, though not an exhaustive treatise, is one that cannot fail to be popular, as it is written in a pleasing and interesting style. The various questions connected with anæsthesia are taken up in order, and take up the first hundred pages or so.

The remainder of the work is occupied by the consideration of forty-seven different anæsthetics of more or less value, and this is followed by anæthesia by rapid respiration and by electricity.

Illustrations of different forms of inhalers are given and and sphygmographic tracings of the pulse, under the influence of different anæsthetics.

2. This work, long regarded as authoritative, has become somewhat antiquated, but the revision of it has brought it up to the present times, and has necessitated a great many changes. Some chapters have been omitted and others very judiciously added.

The causes of stone are carefully considered, as also the solvent and preventive treatment of calculus. The statistics of lithotrity and lithotomy are given at such a length as may prove of value, and Prof. Bigelow's operation is deservedly given a chapter to its consideration, the author acknowledging the great importance of the method and the revolution which it has created in the doctrines held in regard to lithority.

3. The subject of food is one of the highest importance to

the healthy as well as the sick. The author gives full attention to the different aspects of food in the physiological consideration and devotes much space to alimentary principles and substances, the preservation of food, and the principles of dietetics. The practical dietetics, although not embracing many pages, are perhaps the most important to the physician, as it is from these that he expects results. The principles laid down, being well mastered, readily enables the careful reader to form his own conclusions correctly in regard to the proper course to pursue in respect to the alimentation of children and of patients.

The diet of infants, of training, therapeutic dietetics and hospital dietetics conclude this treatise.

The part devoted to beverages is of great importance. The author believes that, from the evidence gathered by him, "the main portion of alcohol ingested, becomes destroyed within the system." He, however, very justly does not consider the subject in regard to alcohol, as at all settled.

4. The work of Dr. Tilt has been known long enough not to need any introduction. This is a reprint of the fourth edition, and the object and scope of the work is clearly expressed in the following words of the author, taken from the preface: "Firstly, the paramount importance of female hygiene for the relief, cure and prevention of diseases of women Secondly, the constitutional origin of many diseases of women, as well the impossibility of curing them and preventing relapses, unless the treatment comprehends such measures as are known to favorably modify conconstitutional taints. Thirdly, the possibility of curing most diseases of women without surgery, by the better application of old familiar remedies and sound hygiene. Fourthly, the utter impossibility of curing aggravated forms of the most common uterine affections unless surgery be combined with medicine and hygiene."

5. This is indeed worth more than one-half of the library for 1881. It has been extensively read and acknowledged as one of the best works on the subject, and the complete and faithful manner in which it has been reproduced, leave nothing to ask for. The plates and engravings are numerous and of a much better quality than those usually met with in this series.

6. Dr. Piffard has expended a vast amount of time and labor in the preparation of this mannual and it is admirably conceived, but it can only prove useful to those who have a library which contains all the books of which reference is made. For instance, under Polygonum Hydropiper, we read: D. Detersive in atonic and scrofulous ulcers, 26, 811. Condylomata, 35, 186. The figures refer to authorities which we find to be respectively as follows in the bibliography: 26. Cazin, F. J. Traité pratique et raisonnée des plantes medicinales. 4th edition, Paris, 1876.

35. Apollinaris, Kurtzes Handbuchlin und Experiment vieler Arzneyen durch den ganzen Körper des Menschen, auswendig und inwendig von dem Haupt an bis auff die Füsse, Frankfurt am Main, 1579.

Of course, there are very few who can have access to these works and to all others, the description given above, of the local use of the drug seems very short and unsatisfactory.

But if we complain of the first part of the book, we must express one pleasure upon looking over the second, which deals with the therapeutics of skin diseases. Here it is that the author really shows himself and in this case he does so to advantage. He believes that the judicious admixture of local and internal treatment is the most effective—this being a mean between the exclusive schools of Hebra and of Alibert.

Diseases are taken up in alphabetical order, and carefully considered, the diagnosis being made as important as the treatment, a course which cannot fail to impress the reader with the necessity of recognizing the affection before attempting to treat it.

The author regards eczema as dependant upon a constitutional state, and recommends general treatment in conjunction with local applications.

The majority of cutaneous diseases and disorders that may be met with, are here considered, and the author does so in a manner which is pleasing, instructive and authoritative enough to be followed scrupulously. This embodies the results of Dr. Piffard's practice and also that of several of his colleagues of the New York Dermatological Society. The author has adopted the nomenclature of the American Dermatological Association, which is considered one of the best, although objected to by many because it rests upon Hebra's system.

A formulary is added which contains a large number of formulæ taken from the works of distinguished dermatologists, and from which the reader may select those he considers the most appropriate. We find that some of the formulæ are in several instances hastily written and imperfect, but on the whole they can be relied upon, and we congratulate Dr. Piffard upon his work.

7. This is a good volume containing twenty chapters and much that may be learned concerning many of the affections of joints. The author has entirely rewritten the book and proceeds from the consideration of the physiological anatomy of bones, acute and suppurative synovitis to the various inflammatory diseases of joints not commencing in the bones. There are considered acute ostitis, chronic ostitis, arthritis deformans, inflammation and degeneration of cartilage, hip-joint disease, sacro-iliac disease affections of sheaths and bursæ, hysteric pseudo-disease of joints, restoration of crippled joints, genu valgum and varum and the removal of diseased joints. In an appendix to the chapter on hip-joint disease he considers the question of lengthening, and

comes to this conclusion: "That additional growth from hip disease, though quite unproven, may occur; that if it does occur it will cause lengthening to between half and three-quarters of its amount. Hence to make an appreciable difference in the length of the limb, such suppositious growth must be large."

The illustrations of this volume are, for the most part good. Some are very poor, but they are few in number. The typographical work is good, although the amount of matter has forced the publisher to set it very close, which is a disadvantage in reading.

8. The author has aimed, in this volume, rather to give clinical facts and experiences, than theoretical considerations, endeavoring to make his work as practical as possible.

Prof. Da Costa's introductory chapter is devoted to the treatment of fever in general as far as related to the forms described by the author. His directions are general and plain.

Dr. Wilson takes up into consideration simple continued fever, influenza, cerebro-spinal fever, enteric or typhoid fever, typhus fever, relapsing fever and dengue, as he thinks the time has not yet come, to include pneumonia, diphtheria and acute rheumatism among the fevers.

He considers the exanthemata as entirely without the scope of his work, and their classification among fevers as unscientific and provisional. Dengue he does not consider an exanthem as its eruptions are so variable and inconstant as to preclude its admission into that class.

9. This is a work which seems to be more designed for the pharmaceutist than the physician. Yet even to the dispensing druggist, but little that is here found can be assimilated by him as the manufacturers of chemicals and pharmaceutic supplies have all the officinal preparations ready made for the druggist, and are constantly bringing out new remedies that no pharmacopœia can keep pace with.

The chief merit of the present volume lies in its brevity, and the greater intimacy it may effect with the pharmacopœias of foreign nations, a thing which will be necessary until an international pharmacopœia is established.

10. The name of Charcot alone commands respect wherever medicine has followers. Senile pathology, the febrile state in the aged, gout and rheumatism in all their forms, and the clinical importance of thermometry in old age, constitute the twenty-one chapters by Charcot.

The remaining ten chapters by Prof. Loomis include senile pneumonia, chronic catarrh of the bronchi, asthma, atheroma, apoplexy, cerebral softening, chronic gastric catarrh, senile constipation and senile hypertrophy of the prostate.

The translation of Charcot's lectures has been well made,

and of the subject matter, as of that of Prof. Loomis' lectures, it is unnecessary to speak, as their eminence in the profession is a sufficient guarantee of the excellence of their lectures.

11. This volume is a good compilation and condensation of the knowledge of ophthalmology as held at the present time. There is a great deal of original matter interspersed throughout, and the long experience of Dr. Noyes as a teacher of this branch of medicine, has eminently fitted him for the work he has undertaken and brought to such a successful termination. The book is a good exponent of the present status of ophthalmology, and has been written in such a manner as to give a fair knowledge of the subject to the careful reader.

We notice that an operation for the advancement of the rectus described in the JOURNAL, June, 1881, by A. E. Prince, is given an appropriate and deserving place. The illustrations are numerous and good and Prof. Noyes can be readily recognized in many of the cuts, he appearing the same as ever.

THE NURSE AND MOTHER. A Manual for the Guidance of Monthly Nurses and Mothers. Comprising instructions in regard to pregnancy and preparation for child-birth, with minute directions as to care during confinement, and for the management and feeding of infants. By WALTER COLES, M. D. 8vo. pp. 153. (St. Louis: J. H. Chambers & Co. 1882.)

Dr. Coles has written, in this, a very handy little volume, containing much that is good, and little that is new. But if most of the matter is old, it is sound and will bear repetition very well. He, perhaps, expects too much of the nurse, and may work some injury if the book falls into the hands of those who are "wise in their own conceit," and who may imagine that after a perusal of this manual, they will be qualified for any emergency that may arise. However, a judicious use of the precepts given cannot fail to give the utmost satisfaction both to patient and physician.

On the whole, Dr. Coles' Manual is a good one, and one that can be recommended for the use for which it is intended.

The book is well gotten up as far as regards paper, binding and type, but the press work is not good, there being, however, but few works that are entirely illegible.

A TREATISE ON THE DISEASES OF INFANCY AND CHILDHOOD. By J. LEWIS SMITH, M. D. Fifth Edition thoroughly revised, with illustrations. 8vo. pp. 360. (Phila.: H. C. Lea's Son & Co. 1881. St. Louis. Hugh R. Hildreth Printing Co.)

Smith's treatise has always been a popular one and is

eminently adapted for the use of students. This, the fifth edition has been improved, certain additions having been made to the various chapters and a few additional diseases being treated of, such as strumous ophthalmia, which was confided to Dr. O. D. Pomeroy, Surgeon to the Manhattan Eye and Ear Infirmary.

Dr. Smith has had a large clinical experience in children's diseases and knows whereof he speaks. This book is intended as a practical one, theories being discarded as much as possible and clinical data being abundantly employed.

We are sorry to see that so little space has been accorded to the consideration of the dermatoses of children, especially that the author has not prepared his remarks on this subject by a general consideration of the characteristics of skin diseases in infancy. Six pages are devoted to eczema, which is giving but a very imperfect notion of a disease which is so inveterate and persistent.

THE SCIENCE AND ART OF MIDWIFERY. By WILLIAM THOMSON LUSK, M. D. With numerous illustrations. 8vo. pp. 687. (New York: D. Appleton & Co. 1882. St. Louis: Hugh R. Hildreth Printing Co.)

This is a work that has been brought up to the times, and which is a credit to the author. It is written in good English and shows that Dr. Lusk is not only acquainted with his subject by personal experience, but that he has paid great attention to its literature.

He does not pay so much attention to the theories of authors as to the showings of clinical experience and we may here add, that this is becoming an almost distinctly American trait, the elaboration of hypothesis being left to our trans-Atlantic brethren.

The author has made an improvement on Tarnier's forceps and has made a novel cephalotribe.

Throughout his work he gives preference to German methods and recommends the dorsal position in labor and for the application of the forceps.

He has dwelt considerably and correctly, we think, on the importance due to deformed and contracted pelves. All the types and varieties are considered accompanied by such hints as may prove most useful.

The teratological part is not very long but the admirable work of St. Hillaire will remain for many years to come, the authority on this subject and an exhaustive treatise on this alone would embrace several volumes.

Books and Pamphlets Received.

Article LXXIII.

An Index of Surgery: being a concise Classification of the Main Facts and Theories of Surgery, for the Use of Senior Students and Others. By C. B. Keetley, F. R. C. S. 8vo., pp. 208. (New York: Bermingham & Co. 1882.) Price $1.00.

Medizinische Jahrbücher, herausgegeben von der K. K. Gesellschaft der Aerzte. Redigirt von Prof. E. Albert and Prof. E. Ludwig., Jahrgang 1881. III. IV. Heft 8vo. pp. 291–574. (Wien: Wilhelm Braumüller, 1881.)

A System of Surgery, Theoretical and Practical in Treatises by Various Authors. Edited by T. Holmes, M. A. Cantab. First American from Second English Edition, Thoroughly Revised and much Enlarged, by John H. Parker, A. M., M. D., assisted by a Large Corps of the most Eminent American Surgeons. In Three Volumes with many Illustrations. Vol. III. 8vo. pp. 1059. (Phila.: Henry C. Lea's Son & Co. 1882. St. Louis: Chambers & Co.)

Third Annual Report of the State Board of Health of Illinois, with the Official Register of Physicians and Midwives, 1880. 8vo., pp. 268. (Springfield: H. W. Rokker, State Printer, 1881.)

"Rande" (Charles C. Scott),—A Medico-Legal Record. By one of the Expert Witnesses. (Reprint from the *Alienist and Neurologist*, April, 1882.)

Hubbard's Newspaper and Bank Directory of the World, with Gazetteer and Atlas combined, 8vo., Vol. I., pp. 1-1228. Vol. II., pp. 1229-2591. (New Haven, Conn. Edited and Published by S. H. P. Hubbard, 1882.)

Transactions of the American Medical Association for 1881. Vol. XXXII., 1881, 8vo., pp. 684. (Philadelphia: Printed for the Association. Collins, Printer, 1881.)

Anæsthesia and Non-Anæsthesia in the Extraction of Cataract. With some practical suggestions regarding the performance of this operation, and comparative statistics of two hundred cases. By Hasket Derby, M. D. 16mo., pp. 32. (Cambridge: Printed at the Riverside Press, 1882.)

News Items.

THE NEXT INTERNATIONAL MEDICAL Congress will be presided over by Prof. Panum, of Copenhagen, at which place the congress will hold its sittings in 1884. The Secretary-General will be Dr. Carl Lange.

DR. T. HODGE JONES, who details the course of a case of purpura hemorrhagica on another page of the present number of the JOURNAL does so in the hope that some one may lend him prac-

Books and Pamphlets Received.

T. LOUIS MEDICAL COLLEGE.

The Post-Graduate Course of Lectures of the St. Louis Medical College will be held during ring Session in the month of April and continue four weeks.
The Clinical Material at the command of the College will be utelized; this includes ly the Clinics at the College Dispensary, the St. Louis Hospital, the St. Luke's Hospital e City Hospital, but also the material at the U. S. Marine Hospital, the Alexian Brothers al and the Female Hospital.
Selected subjects in Medicine, Surgery and the Specialties will be presented in didactic s by competent men.
Anatomical material in abundance. Fee $30.00

For further information and circular apply to
JOHN T. HODGEN, M. D., 500 N. Jefferson Avenue, St. Louis.
The spring course of lectures for students begins March 13th. 1882.

Doctors Take Notice.

FOR SALE.—A very desirable residence and practice within one hours ride of St ; 6 passenger trains each way daily. A *good* house of ten rooms splendid barn and out- ; ten acres of ground *abundance of all* kinds of fruit. A seminary practice of 150 pupils opposition. Good district school and church privileges.
Terms reasonable—cash prefered. Reason for selling, poor health, must give up eing. This is certainly a splendid chance.
For further particulars call on or address J. F. LEEPER, Globe Democrat
St. Louis Mo.

Transactions of the American Medical Association for 1881. Vol. XXXII., 1881, 8vo., pp. 684. (Philadelphia: Printed for the Association. Collins, Printer, 1881.)

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News Items.

Article LXIX.

We are glad to announce to our readers, that the *Scientific American*, although somewhat injured by the late fire in New York, has already recovered and is in better trim than ever. The new offices are located at 261 Broadway, corner of Warren Street. A noticeable fact is, that no issue was delayed or even impaired in appearance, and speaks a great deal for the enterprise of the firm of Munn & Co.

The St. Louis Medical College Commencement Exercises were held, as heretofore, at Mercantile Library Hall, which was filled to its utmost capacity, by a large, fashionable and appreciative audience.

The Audrain County Medical Society, of Missouri, organized ten years since, holds weekly meetings in Mexico, on Friday evening. The membership is about twenty, and its officers for 1882 are: President, Dr. P. T. Rothwell; Vice-President, Dr. W. H. Lee; Secretary, Dr. W. W. McFarland; Treasurer, Dr. Isaac Sinclair.

The Missouri Medical College held its Commencement Exercises at the Grand Opera House, a rather large class graduating. The Opera House was thronged by a large concourse of interested friends and spectators.

The Next International Medical Congress will be presided over by Prof. Panum, of Copenhagen, at which place the congress will hold its sittings in 1884. The Secretary-General will be Dr. Carl Lange.

Dr. T. Hodge Jones, who details the course of a case of purpura hemorrhagica on another page of the present number of the Journal does so in the hope that some one may lend him prac-

tical assistance and advice in regard to more efficient treatment in such a case.

THE Tonga suit recently decided in favor of Messrs. Parke, Davis & Co., of Detroit, seems to have raised quite an excitement and the average practitioner is being flooded with literature bearing on the subject, pro and con. We do not care about taking sides with either party, as both are well able to defend themselves, and we are sure that physicians are intelligent enough to arrive at a decision upon the documentary proof which has been so lavishly furnished by the parties most directly interested in the matter.

THE St. Joseph Hospital Medical College held its Commencement exercises at Tootle's Opera House, Monday Evening, Feb. 27th, 1882, with a class of nine graduates.

WE have received the *Medical Register*, a monthly record of the literature of medicine and allied sciences with critical reviews, book notices and other items of a bibliographical character in so far as relates to medical publications. It is well gotten up, at one dollar per year, by P. Blakiston, Son & Co., of Philadelphia.

MESSRS. Wood and Appleton, of New York, and Leas of Philadelphia, have formed a combination to print medical books at the rate of ten cents. The poor but honest practitioner of medicine, (and who doesen't know him?) will profit in the cut rates, whether the publishers do so or not.

Miss Marguerite Owen Compton, daughter of Dr. J. W. Compton, editor of the *Evansville Medical Reporter* that was, was married to Ira Dayton McCoy Esq., at Evansville, Ind., on March 28th. We wish the young couple many happy returns of the day and may Dr. Compton be cheered by the babblings of his grandchildren.

THE Secretary of the Surgical Section of the American Medical Association requests all gentlemen who are writing papers to be read before that Section at its next meeting, to notify him at least one month before the time of meeting. And also to give at the same time, the titles of their papers and their probable length. By so doing the titles will be published in time for the members to be prepared for the proper discussion of the various

subjects. And he suggests that all gentlemen taking part in the debates, reduce their remarks to writing, so that the report may be more accurate and valuable as a mirror of present scientific thought. Communications should be addressed to William A. Byrd, M. D., Sect. Surg. Section American Medical Association, 407 Jersey Street, Quincy, Ill.

DR. Theodore Schwann, Professor of Physiology in the University at Liege, died at Cologne on January eleventh, at the age of seventy-one. He was celebrated as the first exponent of the doctrine of cell-formation in animals.

WHERE IS THERE AN EPIDEMIC OF DIPHTHERIA?—Drs. H. C. Wood and Formad desire to know of the existence of an epidemic of malignant diphtheria in order that they may continue their research upon the nature of the diphtheric poison. Dr. Formad will go to any locality within eight hundred miles of Philadelphia. All letters may be directed to the University of Pennsylvania.

E. B. TREAT, of New York, announces the early publication of an illustrated quarterly of medicine and surgery. Each number will contain four plates, chromo-lithographs, autotypes, or fine wood cuts, illustrative of various diseases in medicine, surgery and pathological anatomy. Each plate will be accompanied by a history of the case depicted, besides short practical articles illustrated by wood cuts. The names of the editors are not given.

DIED, in Philadephia, on the seventh of March, age seventy-seven years, JOSEPH PANCOAST, M. D., Emeritus Professor of Anatomy in Jefferson Medical College. Dr. Pancoast was born in Burlington County, N. J., in 1805. He studied medicine at the University of Pennsylvania, and graduated in 1828. In 1838 he succeeded Dr. George McClellan as Professor of Surgery in Jefferson Medical College, and in 1861 was transferred to the Chair of Anatomy. In 1873 he resigned his professorship, and was elected Emeritus Professor of Anatomy.

METEOROLOGICAL OBSERVATIONS.

By A. WISLIZENUS, M. D.

The following observations of daily temperature in St. Louis are made with a MAXIMUM and MINIMUM thermometer (of Green, N. Y.). The daily minimum occurs generally in night, the maximum at p. m. The monthly mean of the daily minima and maxima added and divided by two, gives quite a reliable mean of the monthly temperature.

THERMOMETER, FAHRENHEIT—FEB., 1882.

Day of Month.	Minimum.	Maximum.	Day of Month	Minimum.	Maximum.
1	26.0	41.0	18	42.0	54.5
2	34.0	49.5	19	39.0	42 0
3	33.0	47.0	20	36.5	47.5
4	34.5	45.5	21	21.0	29 0
5	37.0	56.5	22	21.0	38.5
6	41.5	64.0	23	24.0	36.5
7	46.5	64.0	24	24.0	39.5
8	31.0	40 5	25	31.5	52.0
9	34.0	52.0	26	43.0	55 5
10	35.5	57.0	27	45.0	53.5
11	48.0	56.5	28	52.0	56.0
12	51.0	71.0	29		
13	42.0	47.5	30		
14	35.0	50.0	31		
15	40.0	60.0			
16	53.0	580.	Means	37.2	50.3
17	39.5	44.0	Monthly Mean.	43.7	

Quantity of rain and snow, 7.51 inches.

MORTALITY REPORT.---CITY OF ST. LOUIS.

FROM FEB. 4, 1882, TO MARCH. 4 , 1882, INCLUSIVE.

Small Pox..... 3	Childbirth..... 3	Convulsions & Trismus Neonatorum 42	Syphilis..... 1
Scarlatina. 15	Inanition, Want of Breast Milk, etc. 6	Hydrocephalus and Tub. Meningitis. 6	Apoplexy 4
Pyæmia & Septicæ 4	Alcoholism.. 6	Meningitis & Encephalitis 11	Dis. fem. gen. org. 5
Erysipelas 5	Rheumat'm & Gout	Other Diseases of the Brain and Nervous System22	Surgical Operation 0
Diphtheria 11	Cancer and Malignant Tumor.... 11	Cirrhosis of Liver and Hepatitis ...17	Execution..... 0
Membran's Croup. 8	Phthisis & Tuberculosis, Pulmon 91	Enteritis, Gastro-Enteritis, Peritonit, and Gastritis' 19	Deaths by Suicide 6
Whooping Cough. 4	Bronchitis.. 41	Bright's Disease and Nephritis... 8	Deaths by Accid't 21
Ovarian tumor.... 0	Senility 28	Other Diseases of Urin ary Organs. 1	Deaths by Homicid 5
Measles 3	Pneumonia..... 76	Diabetes 0	Congen Debor'ty 29
Typhoid Fever....10	Heart Diseases ... 32		Total Deaths from all Causes.... 941
Cerebro Spinal Fev 5	Other Diseases of Respir'y Organs 15		Total Zymotic Diseases 106
Remittent, Intermittent, Typho-Malarial, Congestive & Simple	Skin Disease..... 1		Total Constitutional Diseases.....128
Contin'd Fevers,19	Marasmus — Tabes Mesenterica and Scrofula. 5		Total Local Diseases 298
Puerperal Fevers.. 3	Other Const. Dis. 14		Total Develop'tal Diseases 60
Diarrhœal Disea's 14			Deaths by Viol'ce 53
Other Zymotic Diseases 0			

CHAS. W. FRANCIS, *Health Commissioner.*

Vol. XLII. MAY, 1882. No. 5.

Original Contributions.

Article LXX.

Fibroids of the Uterus.* By N. M. Baskett, M. D., of Moberly, Mo.

It is my desire to present to this society, a paper upon sub-peritoneal fibroids of the womb and report a case of the kind which was mistaken for ovarian cyst, by myself and several other medical gentlemen, and which was operated upon with the usual termination which follows an operation for the pathological condition mentioned.

Histology.—Uterine fibroids consist in their histology, of tissues similar to those from which they originate. A true fibre of pale, pearl-like consistency, not highly vascular, enclosed in a thin, translucent, cellular tissue, giving the tumor when incised, a pearly grey appearance. Rindfleisch says: "The textural elements are those of cicatricial tissue. In cutting it, it creaks under the knife. If we tear off a minute fibril from the cut surface and pull it to pieces, we are astonished at the enormous volume which the fibril assumes; that is to say, the enormous number of minute fibrillæ into which it may be broken up. As a well braided tress occupies far less space than a disheveled braid of hair, so we must also here represent to ourselves, that in the fibroma the fine and the finest fibrils are extraordinarily closely pressed together, until they are loosened by our needles and then occupy an astonishing amount of space."

Between the fibrils, which are of glue yielding substance, the cells are visible. They are small, oval structures with shining nuclei; besides which, according to Rindfleisch, "we find rows of spindle cells running through the tumor, in various directions and roundish foci of germinal tissue, which are here and there sprinkled into the continuity of the fibres." Thomas says: "These growths are found in connection with the parenchyma of the uterus, and are identical in structure, except in the proportion of elements forming them. They have been described

* Read before the Moberly District Medical Association

under the names of fibro tumors, uterine fibroids, fibroma and by Virchow and Klob as myoma."

"Under the microscope," says Thomas, "these growths are found to consist of long, fine fibres, generally united in bundles of fusiform fibre cells, analogous to fibro-plastic elements, and of round, or elliptic granules of small size. The whole being bound together by fine intercellular substance. This type is departed from by the formation of cysts in the midst of the fibrous tissue, which constitutes the tumor one of fibro-cystic character."

West says, "These tumors are chiefly remarkable for their hardness and small degree of vascularity." His description and that of other authors whom I have examined, coincide in the main, with those already quoted.

FIBROIDS NOT MALIGNANT.—It is only necessary to mention here, that these tumors, up to a recent date, were classed as malignant; but microscopic research and more thorough clinical observations, have proved this a mistake. At the same time, we should not overlook the fact that cancerous degeneration may occur in this tissue as easily, or more easily than any other portion of the system.

FIBROIDS SUBJECT TO CERTAIN FORMS OF DISEASE.—Again they are liable to a variety of diseases, "the most frequent of which are œdema, fatty, colloid, inflammatory and calcareous degeneration."

FIBROIDS, SIMPLE AND COMPOUND.—These tumors are classed as *simple* and *compound*, the first consisting of one tumor, which is generally spherical and which is connected by loose connective tissue with the uterus. Compound tumors are made up of a number of smaller tumors connected by loose connective tissue. Authors are generally agreed that this is the most common form of tumors found in connection with the sexual organs of women.

FREQUENCY OF FIBROID.—They are rarely single, more than one usually existing in the person unfortunately predisposed to them. Bayle (quoted by West) states that one in every five women, who attain the age of thirty-five, are affected with them. While M. Pichard met with them only seven times in 800 examinations. Mr. Pollock found 39 in 583. These latter were in women of all ages. Tables show a larger proportion of fibroids in women between the ages of 40 and 50 than any other age;

but West thinks these tumors more incidental to the period of sexual vigor than its decline.

POSITION OF GROWTH.—These growths are found in three different positions. Intra-uterine, intra-mural and sub-peritoneal. In the first case, the tumor develops itself near the uterine cavity, and grows inward, assuming a pedunculated form, from which position it may be thrown off by uterine contraction, or torsion, or excision may be resorted to by the surgeon. This is, perhaps, the most amenable to surgical treatment and least liable to terminate fatally.

INTRA-MURAL FIBROIDS.—The intra-mural developes in situ, remaining enclosed in the uterine wall, thickening, often inordinately, that portion of the uterus in which it may be developed.

SUB-PERITONEAL FIBROIDS.—The sub-peritoneal, which is the most frequent variety, developes under the peritoneum, in the pelvic cavity, where it may remain unsuspected for a long time; but certain conditions frequently conspire to produce a rapid growth and wonderful development, which by its interference with and pressure upon pelvic and abdominal nerves, vessels and viscera, may become highly dangerous to life, and if not, may by the distress and suffering produced, prove almost insupportable.

SIZE OF TUMORS.—The size which these tumors may attain when intra-mural or sub-peritoneal, is probably unlimited. Although usually of small size, Thomas states they may grow to the enormous weight of fifty pounds, while West speaks of tumors weighing eighty pounds, and refers to one delineated by Walter, which weighed seventy-four pounds.

PREDISPOSING CAUSES.—The predisposing causes which are said, by Thomas, to produce fibroid are:

"Race—the African being more liable than the other races.

Age—as previously mentioned, the greater number occurring between 35 and 40 and 40 and 50."

Sterility is another cause mentioned by medical writers, while the various disorders of the menstrual functions may produce them.

EXCITING CAUSES.—This last I think might be classed as an exciting cause, particularly menorrhagia and dysmenorrhœa.

The exalted function of the uterus would render it particularly liable to take on a diseased action, which might manifest itself in the production of abnormal tissue. Just as we have mucous casts of the uterus known as dysmenorrheal membranes, the result of the laborious and perverted function of that organ. But Thomas, quoting the words of Sir Chas. Clarke, says, "nothis known respecting the cause of this disease," and he coincides with Clarke. Why one cell should develop at the expense of the surrounding tissues until it has assumed a relation to them which threatens their destruction, will probably always remain a matter of speculation. But it seems to me that the cause mentioned above with others, such as injuries, falls, blows, etc., are immediate exciting causes, which may produce perverted growths in the region of the womb and elsewhere.

PROGNOSIS.—Prognosis, in all forms of this trouble, should be cautious. Hodge, Ashwell, Schroeder, Thomas and West, all coincide in the statement, that fibroid rarely proves fatal; but the three last agree that fibroid, by excessive growth, may infringe upon the surrounding structures and, by its interference with their functions and the dangerous effects upon the system, demand active means for relief.

Schroeder in Ziemssen, p. 249, Vol. X., says: "Owing to the fact that these tumors are seldom radically cured, they constitute a life-long malady not directly threatening life, but greatly interfering with its enjoyment, and sometimes seriously impairing its vital power." Thomas says: "Fibrous tumors, unless of great size, rarely end fatally. Yet, death from them is not so infrequent as to warrant an entirely favorable prognosis." While West finds great danger in those cases which become complicated with pregnancy.

DIAGNOSIS.—The great question which interests the medical practitioner is—diagnosis. How can he recognize fibroid of the womb? So many and so varied are the diseases of the pelvic and abdominal viscera, that it is indeed a *questio vexata* to lay down a course, by which we can arrive at certainty in classifying these troubles. Abdominal dropsy, pregnancy, impacted fæces, hematocele, ovarian cysts, fatty tumors developing in the pelvis and growing toward the abdominal wall, lymphoma, tumors adherent to the bladder, are all to be considered. Our only method of diagnosis is by exclusion, and the sources of

error are so many that the most competent men in our profession have frequently found themselves at fault. Ashwell says, "It is often exceedingly difficult when the growth occupying the abdominal cavity is large, filling perhaps, its greater portion, to determine whether the uterus, or ovary, or both may not be diseased. Occasionally after repeated examinations by those accustomed to make them, and a careful appreciation of all the signs, a positive diagnosis can scarcely be made." Ashwell it will be remembered, classes fibroid among malignant tumors. None of the later authors I have examined coincide with him.

Hodge says, "In all abdominal tumors the diagnosis is uncertain as to the number of tumors and their location but even as to their existence. This general declaration may seem singular to the inexperienced or even to the experienced practitioner, who has acquired much confidence in his own skill. I have heard so many discordant opinions from men of undoubted science and experience, and so much unavailing and sometimes dangerous practice, resulting from a false diagnosis as regards the various forms of abdominal tumors, as to justify the declaration just made, of the uncertainty of diagnosis in cases of tumor within the abdomen. Pregnancy has been mistaken for encysted dropsy, or peritoneal dropsy, so that upon performing paracentesis abdominis, the puncture has been made into a pregnant uterus. Gastrotomy has been performed for ovarian tumors which proved to be uterine or even where no tumor of any kind existed."

I might go on multiplying observations from other authors on the difficulty of correct diagnosis, in abdominal and pelvic swellings. In fact, a large volume could easily be written upon this subject; but I refer you to various works upon female diseases, by authors of our own and other countries. In the meantime as it is with the distinction between uterine fibroid and ovarian cyst, this paper has chiefly to deal, I shall relate the history of our patient, and then show the causes which led us into error. About six weeks ago I was called to examine Mrs. H. C., of Monroe County, Mo., who had but recently removed to our city. She was 39 years of age, married, the mother of two living children and one or two dead. She informed me that for more than a year she had been troubled with a tumor which had been growing in her abdomen. That for the last few months it had grown rapidly until it now nearly filled the abdominal

cavity. Her figure was that of a woman 7 or 8 months pregnant. She seemed in reasonably good health, but informed me that during the warm weather of last summer, she came near dying from convulsions produced by the tumor pressing upon the pelvic viscera, vessels and nerves. The facies uterini was well marked, and I found that she had suffered from metritis and had been treated for it by my friend Dr. Dysart, of Paris, Mo. I placed her in a recumbent position upon the bed and examined her closely, while lying on her back and on her side. I found a large tumor nearly filling the abdominal cavity, well marked, particularly on the right side. On the left side the fingers could distinctly feel the edge of the tumor, while low down near the linea alba, but to the right and above the os pubis, I discovered what I thought to be the pedicle of the tumor. The feeling imparted to the sense of touch was that of fluctuation. The abnominal walls were thick, but percussion of the tumor seemed to give the wavy sensation which we obtain in ascites or cystic dropsy.

I found that her menstrual periods came on about every 25 days, but were not immoderately large. A vaginal examination revealed the womb slightly drawn up, the os soft and patulous with the sensation of a tumor pressing from above and to the right. I diagnosed an ovarian cyst. She told me then that she had been examined by three other physicians, Drs. Dysart, Lloyd and Howell of Monroe County, each of whom had made the same diagnosis. She told me she had come to our city to be operated upon as soon as it could conveniently be done. I asked her who was to perform the operation and she informed me, Dr. Dysart of Paris. That she had insisted upon an operation during last summer, but he had advised her to wait.

I told her of the dangers of the operation, the possibility of her dying upon the operating table, the strong probability of dying subsequently. She informed me that she had considered the whole case; that life was a burden to her in her present condition, and that if there was a chance to recover by means of an operation, she preferred to take it. I told her there was a chance.

I received a letter from Dr. Dysart asking me concerning my diagnosis, which I wrote him. Mrs. C., insisted upon the operation and I also wrote asking Dr. Dysart when he could operate. He appointed the 24th day of January as the time. I had previously placed Mrs. C., on tinct. ferri mur. gtt. xv. 3 times per

day, at his request. I also gave a full dose of ol. ricini on the 23d, and at night, grs. x. of quinine sulph. with gtt. xxv. tinct. opii.

Dr. Dysart came up on the 23d, accompanied by Drs. Moss and Howell of Paris and Dr. W. A. Byrd, of Quincy, Ill., whom he had invited to be present and assist at the operation. On the morning of the 24th, Dr. Dysart, Dr. Byrd and myself, walked over to see Mrs. C., and Dr. Byrd then examined her for the first time. After a careful examination, he confirmed our diagnosis and said he thought Mrs. C., a good subject for operation. Mrs C., was in good spirits and said she was glad we had come.

Ten o'clock was the hour decided upon for operation. The physicians of Moberly were invited to be present and most of them responded. Preliminary arrangements having been made, Mrs. C., after affectionately caressing her husband and children, took her place upon the operating table without a tremor. Dr. Howell administered the ether which was well borne. After the urine was drawn off, an incision was made in the linea alba, through the fat and superficial fascia, from the umbilicus to the os pubis. The tendons of the abdominal muscles were then divided on a grooved director with the peritoneum when the tumor was exposed covered by the great omentum which was adherent to its anterior surface. The tumor still yielded to the touch, a sense of fluctuation, and was still considered cystic by those present. The omental adhesions were loosened and an attempt made to introduce Spencer Wells' trocar and canula, which, however, failed to bring any fluid. A smaller trocar was then used, which also failed, when we discovered we were deal ing with a solid tumor. This being the case, it was necessary to extend the abdominal incision upward to a point midway between the umbilicus and the sternum, when the tumor was more fully revealed—a long, solid tumor, lying with its great diameter transversely across the line of incision, the pedicle about an inch and a half long and an inch thick, lying a little to the right of the linea alba, and springing from the fundus of the uterus, showing it to be a fibroid of the womb. After two ineffectual attemps to ligate the pedicle with silk, a Smith's clamp was used and the pedicle then ligated, both above and below the clamp.

Slight adhesions were found between the tumor and the parietal layer of the peritoneum. These were removed and the

tumor was then turned out of the abdomen. I show you here a photograph of the tumor which weighed nine pounds. It is well for me to state here that all the steps of the operation were performed with the greatest antiseptic care.

The hemorrhage, from the pedicle and the bleeding omental vessels, was then checked with ligatures of carbolized catgut, small portions of the great omentum beyond the ligatures were removed. The bowels, abdominal and pelvic cavities were thoroughly cleansed with carbolized sponges dipped in water of 100° Fahr. The abdominal incision was accurately closed with deep stitches, antiseptic silk being employed. A drainage tube was placed in the lower part of the incision. Layers of cotton wool were laid over the wound, and a binder of flannel passed around the body and drawn tightly and fastened with safety pins. The patient was then cleansed and placed in bed. She had been under the influence of ether for three hours. A hypodermic of morphia grs. ½ was administered, and we left her for dinner. It was now 2 o'clock P. M.

At 4 o'clock I returned and found the patient resting comparatively easy. Pulse begining to react, from the effects of ether, 100 per minute. Administered per rectum, quin. sulph. grs. x., tinct. opii gtt. xxv., in warm water. Introduced catheter and drew off urine.

Returned at 10 P. M. Patient restless and suffering pain. Gave hypodermic of morphia grs. ½. Complaining of thirst, ordered crushed ice to relieve. Pulse 110, temp 101½°.

1 A. M., patient resting comparatively easy, though complaining of nausea. Is very thirsty and perfectly conscious. Drew off urine with catheter. Administered quinia sulph. and tinct. opii, same dose as before with table spoonful of brandy. Pulse 115, temp. 102° in vagina.

3 o'clock A. M., patient began to vomit, complaining of great pain in gastric region. Crushed ice for vomiting, with teaspoonful doses of lime water and milk. This failing to give relief, ordered spts. camph. to be laid across neck and chest. This also failed, when I gave hypodermic of morphia, which allayed the distress for a short time.

7 A. M., patient conscious and hopeful. Pulse 120. Temp. 103°. Drew off urine and gave quinia and ludanum per rectum. Began vomiting again. Ordered spts. ammon. aromat. five drops to be given every hour with ice. It had no beneficial effect.

At 10: 30 A. M. returned. Found patient suffering very much from vomiting, and remained with her until 1 o'clock. Pulse 120. Temp. 103°½. Gave morph. hopodermically. Examination showed the existence of peritonitis. Vomit beginning to assume coffee-ground aspect. Gave injection quinia, laudanum and brandy and drew off urine.

At 4 o'clock returned and found patient easy, pulse and temp. same as at 10: 30. Some vomiting at intervals. Ordered quin. sulph., tr. opii at 6 P. M. Returned at 9, found patient conscious but resting badly. Complains of excessive pain and thirst and vomits constantly. Pulse 140 and upward. Temp. 105°. Nothing relieved vomiting—now the true coffee-ground type. Morphia hypodermically, relieved the very bad symptoms, and at 11 o'clock I lay down to rest awhile.

I was called at 12: 30 by the nurse. Patient still vomiting constantly. Extremities cold and bathed in clammy sweat. Patient conscious but says the room "is growing dark." Pulse rapid and feeble. I saw that the end was approaching and told the nurse to summon her husband and children. I administered brandy hypodermically and per rectum, and stimulated the flickering flame a little longer.

The lady was a Catholic, and the nurse asked if she should send for the priest. I told her, yes. He came and administered the last rites of the church. She lived but a few minutes longer, the heart's action failing for want of nerve force, probably due to septicemic condition of blood. She died thirty-eight hours after operation.

[TO BE CONTINUED.]

Article LXXI.

NOTES ON CASES IN GENITO-URINARY SURGERY.

—Case No. VIII.—

Strictures of large Calibre in the Penile Urethra, and at the Bulb.—Severe Chronic Prostato-Cystitis and Inflammation of the deep Urethra.—Urethrismus.—Internal Urethrotomy.—Improvement. By W. Hutson Ford, M. D. of St. Louis.

Nov. 8, 1875. H. W. W., æt. 40. Gonorrhœa sixteen years ago. Had been several times treated for stricture, mostly by dilatation. A surgeon of New Orleans, divided a stricture in front of the scrotum with Civiale's urethrotome, and incised the meatus. He can pass a 13 bougie, English scale, (·22 F.) without much difficulty. Nevertheless, the stream of water is very small, barely an eighth of an inch in size, part of the urine falling straight down from the meatus in drops.

Urethrismus

The urine is strongly alkaline and ammoniacal. He cannot execute the *coup de piston*. After coitus the seminal fluid runs slowly away. There is a marked cystitis and some gleety discharge.

B. B. 22 shows contraction just within the meatus. B. B. 20 shows another contraction half an inch in extent, just about the peno-scrotal angle. B. B. 12 passes the bulb with difficulty. C. S. 22 passes into the bladder with some little pressure. This shows the contraction at the bulb to be either of the elastic resilient variety, or to be more probably, in part of a reflex character. In the latter case the contraction would exist in the membranous urethra, being due to the spasm of the muscles surrounding it and proper to the urethra itself.

Ordered nightly hip baths; quinine grs. v. thrice daily, a suppository of opium, belladona, and camphor at night, and an alkaline diuretic mixture containing hyoscyamus.

Nov. 14. Was somewhat improved for a few days. Has been suffering since day before yesterday with frequent scalding

micturition. I told him his strictures would have to be divided and that I proposed to cut those anterior to the scrotum at a primary operation, and afterwards to divide the one at the bulb, if in my judgment it should still be necessary to do so. By dealing first with strictures anterior to the bulb, we elimimate their influence in causing reflex contraction at or near the bulbo-membranous junction.

The patient having consented, Otis' dilating urethrotome was adjusted to the deeper of the two outer scrotal strictures and screwed up to 25. The knife was then passed down the urethra, and the instrument screwed up anew to 30. The knife was now drawn forward through the space of an inch and a half, the urethrotome unscrewed and partially withdrawn. While still in the urethra it was adjusted to the anterior stricture and screwed up to 28. The knife was passed down, and urethrotome having been dilated once more, to 32, the knife was drawn again through the stricture. The two ante-scrotal strictures were now divided. Internal Urethrotomy.

A conical steel sound, 30, was now passed, without difficulty, into the bladder, demonstrating that the contraction at the bulb, was to some extent spasmodic in character, and due to urethrismus.

The hæmorrhage was quite smart at front, but was readily controlled by cold applications to the penis. The patient was directed to retain the recumbent posture and to take ten grains of quinine at bed-time, and suppository and to send for me at once, should there be pain, inability to pass water, hæmorrhage or a rigor. *No catheter was left in the urethra.* The influence of cold in arresting hæmorrhage from the external genitals is very marked. Under the action of cold, the tissues of the penis, scrotum and perineum contract more vigorously, it seems than superficial tissues anywhere else. The penis itself contracts very sharply, becoming shrivelled up so as to press the walls of the urethra strongly against each other, or against a clot or tube introduced into the canal. This contractility under cold, of the parts named, seems to be due to the large amount of unstriped muscular fibre entering into their composition. Smart hæmorrhage.

Nov. 15. Some hæmorrhage occurred after micturition, but ceased again upon the application of cold.

Rigor. 7 : 30 P. M. Has just had a smart rigor, followed by high fever, accompanied with pains in the back, limbs and head. The penis is a little swollen and tender.

Urethral fever. Pulse 115°, eyes much injected, he is restless and anxious. Ordered calomel grs. iij, podophyllin grs. ¼, pulv. dov. grs. xii, at bed-time; magnes. sulph. in the morning.

Nov. 16, 9 A. M. Still has a good deal of fever; he is sweating profusely. Ordered five drops of Norwood's tinct. veratrum at two hour intervals until four doses be taken; afterwards in two drop doses.

3 P. M. Asleep; easy, pulse 90; ordered continuation of veratrum every two hours; if vomiting supervene the remedy to be intermitted for four hours. Quinine grs. x, thrice daily.

11 P. M. I was sent for hurriedly; the patient had an attack of gastric veratrism at 10 : 30, accompanied with copious stools. Though the symptom had been quite severe, indeed alarming to one not familiar with the behavior of veratrum, all distress passed off very soon, so that when I reached him he was already soundly asleep, with a moderately warm and moist skin. Pulse 60. Ordered two drops of veratrum at 2 A. M.; the same at 4 A. M., and again at 7 A. M.

Gastric Veratrism.

Nov. 17, 9 A. M. Much better; pulse 65; slept well last night, no further nausea or vomiting. B. B. 30 passed down one and a half inches. No pain along the course of the urethra. Micturition is not painful. Ordered veratrum in two drop doses every three hours; low diet, strict recumbency.

Nov. 18, 9. A. M. No fever; pulse 70; skin cool; no pain. B. B. 27 passed deeply; a little oozing of blood.

Nov. 23. The sound has been passed every alternate day into the bladder. C. S. 26 passed easily. C. S. 29 passed with somewhat more difficulty. Holds his water all night; urinates during the day every two hours. The urine is decidedly alkaline.

Improvement.

Dec. 13. The bladder has been systematically washed out once a day with warm water containing Thompson's borax and glycerine wash. He holds his water several hours during the day and gets up to urinate only once or twice during the night. The urine is now scarcely ammoniacal. By careful measurement the perineal stricture is defined at seven inches from the meatus. It can be felt by the finger. The patient was advised to submit to internal urethrotomy for the relief of the stricture and to intermittent dilatation of the whole urethral tract meanwhile, but circumstances soon after this removed him beyond my reach.

Article LXXII.

Diphtheria.— What is It? * By Geo. W. Wilson, M. D., of Queen City, Mo.

I shall not attempt an exhaustive article in the chaste diction of a Professor, but in my own chosen vocabulary will give you my views and experience. Diphtheria scarcely deserves the suffix "itis" as the term is defined, for diphtheria wants the universality which characterizes inflammation.

No fever or inflammation, can with propriety be called sthenic when the blood will not coagulate readily. The normal state of the healthy functions is the intermediate condition between the sthenic and asthenic; and any departure from that normal condition is disease; therefore, I hold that all diseases *must be* either sthenic or asthenic in type, either positive or negative, never neutral.

The more septicemia in the blood the less it will coagulate and some of our best pathologists say it is a doubtful point whether pus *is in all cases*, the product of inflammation.

Years ago, I was in the habit of considering that the sloughing condition in diphtheria was the result of inflammation, but in the light of twenty-four years' experience and close observation, from the initial to the final close, either by resolution or dissolution, I am *now* satisfied that the morbid pathology of diphtheria *is not* the result of sthenic inflammation, but the result of depression of blood highly carbonized and no longer susceptible to normal, chemical affinity, and hence the vicarious action and elimination, and after mobilizing the carbonated blood in the glands, we find nature trying to discharge her functions in a confused way, with the vital force on the retrograde and inadequate to sustain the flagging system; thus, we have the morpholytic condition. A due quantity and quality of the blood is essential, and the natural stimulus to all the movements within the system, and requisite to the support of the vital action; therefore, *a loss or change* in its constituents rendering it less stimulating, must be followed by depression (not inflamma-

* Read before the Moberly District Medical Association.

tion). There may be a loss of constituents through excessive secretions, or diminution by noxious, improper quality of blood interrupting with the formation of chyle; or it may be through the lungs by bad air. Certain substances introduced into the system, do, by a chemical or dynamic influence on the blood so far deteriorate its character as to disqualify it for its normal function. I class as concurrent causes, deficient arterialization and suspended nutritive functions; for example, in cases called malignant fevers, such as typhus; etc., hence the depression of action and reduction of power by positive debility in diphtheria. Blood that has been highly carbonized by noxious gases and improper decomposing food, produces many forms of disease, but not until *after* it becomes amalgamated with the glandular secretions of part of the system, and becomes highly charged with alkaline carbonates, do we have septicemia and that peculiar chemical condition necessary to form diphtheria, typhus, scurvy, erysipelas, etc. I find persons whose glandular secretions are diminished, and somewhat dormant, are not likely to take diphtheria, and if they do, they are the patients most likely to be cured, and on the other hand, those children or persons, whose glandular secretions are very active, and have profuse excretions, if not taken in time, are the cases we call malignant and generally die. It is known that organs or glands excited to unnatural secretions are peculiarly liable to suffer from the influence of miasmata and cold. The causes of disease are exceedingly numerous, and yet the susceptibility of local parts and the mobilizing force of chemical affinities, give us different forms of disease. The predisposition of some people, and the predisposing causes rendered particularly so by the chemical affinity, therefore, the difference of diseases is not in the local cause, but *in the circumstances of their application.* Hence virulent effluvia may be *the initial or producing* cause, whilst the glandular amalgamation *by chemical affinity is the place of incubation* and the determining cause; therefore we have diseases of certain type. Abundantly and rapidly formed exudations are rarely organized, and undergo incipient putrefaction; hence in diphtheria, the fungi and bacterian fallacy dissolves like a phantom at the approach of day. If I may use the expression, there is an important law which plays a very active part in pathological epigenesis: and let us call it *the law of analogous formation,* and under different cognomens we recognize different

diseases, such as typhus, erysipelas, diphtheria, etc., all of which are of a low type.

Just like every organization in nature, pathological growths require a material for their formation; so in the pathologicial morpholysis, we have chemical changes giving us morbid and abnormal secretion manifesting itself in various types of disease.

Some physiologist says, "there seems to be an arrest or suspension of affinity in the parotid glands and does not assume the active and passive condition in the elaboration of that melanotic material": and hence I find persons whose glands are dormant or in a passive condition rarely take contagious diseases. There are always two classes of substances in the blood, the product of decay and the elements of nutrition; the healthy equilibrium of the system requires the dismissal of the former and the appropriation of the latter. Some of the best pathologists assert that we have to classes of *morbid products* which we must distinguish from each other, viz.: those which are formed in fluid secretions (not excretions) possessing special chemical constituents; and such as occur in the parenchyma of organs and tissues.

Things which *do not pre-exist* in the blood may yet occur in the secretions, coming there, not through the agency of cell life, but because of the downward course toward an inorganic condition through which the secretions are spontaneously passing. The morbific secretions may have various local and chemical causes for their origin, improper diet, foul air or noxious and sewer gas, nitrogenous decay, giving us the highly carbonated blood, as the *remote cause, and after* the maxillary glands have mobilized the highly carbonated blood, we have the alkaline carbonates as the *proximate cause*, and from thence we have the constitutional taint, and *not the local from the constitutional*; such is my opinion of the *modus operandi* for diphtheria.

I am not yet ready to admit that diphtheria is so contagious as it is sporadic and infectious, (allow me to make a slight distinction between contagion and infection) not so epidemic as it is endemic. The morbid exudations of diphtheria have a dissolving tendency: hence disintegration and liquefaction of the tissues produced by previous chemical affinities, therefore the diseased or local part loses its vitality and passes from under the influence of normal physiology to that of morbid pathology by chemical laws. From the highly carbonated blood the maxillary glands elaborate a morbid secretion (alkaline carbonates), the

products entering the circulation giving diphtheria; when the mesenteric glands are very susceptible we get enteric, and when in the sebaceous follicles we have erysipelas, etc., and you will find when the blood is highly impregnated with carbon, then the most susceptible glands are the salient points. The probability is that some causes act locally on one organ exclusively, others act generally on several organs, some universally on all, and do so by the susceptibility of different glands and their affinity of chemical relations: hence the vicarious action and the various types of disease.

When the blood and lymph are coagulable, and capable of organization, and form a new living structure, then such would be sthenic; not so in diphtheria, (or diphtheritis as some would call it) the blood and exudations *are not* coagulable, and if so to a very slight extent and *totally* incapable of organization, for the coagulation is prevented by an excess of alkaline carbonates, (ammonia, say Andral and Gavarret,) and no granular corpuscles thrown out, and you see this womld be asthenic.

The blunders in the pathology of diphtheria are the breaking line for such promiscuous treatment, and so long as there are such discordant views of pathology, so long will there be a record of melancholy failures, and the profession submit to the withering peril of skepticism.

Such as leuco-phlegmatic patients whose blood is more watery, and have a copious glandular secretion, we should be energetic and faithful, for they generally prove fatal and the disease is called malignant.

Upon a *careful examination* you find in *true* diptheria, the tumefaction is attended with a softness and flaccidity so different from sthenic inflammation. Some writers say that in good constitutions, the fever in diphtheria is sthenic(?) and when epidemic it has a typhoid character (!). Some physicians consider that there is a close analogy between diphtheria and erysipelas, pathologically and relatively twin sisters. I think there is a great marked difference, for the initial stage of erysipelas is the phlegmonous, which attacks the areolar and adipose tissue, whilst diphtheria first attacks the glandular sytem.

Now about diphtheria and croup and their anology, some physicians talk about the similitude of diphtheria and croup; what a vague idea, when from a pathological view there is such

a great broad line running so plainly between the two. Some say there is such a close analogy; why so? why claim diphtheria is epidemic and contagious? Who believes that croup is contagious? The exudation thrown out in croup *is upon* the surface and capable of organizing a membrane; whilst in diphtheria the morpholytic condition *is underneath the epithelium* and only appears superficially *after* the melanotic condition has liquefied the tissues, for the microscope reveals the disintegrations of the epithilial cells in different stages. In croup the blood *will coagulate* and the plasma *is capable* of organization. Not so in diphtheria, having lost its vitalizing force and induces liquefaction of the tissues. Where is the analogy?

In diphtheria, croup and erysipelas there are more anomalies than analogy. In all low grades of diseases, with the vital forces on the retrograde, any form of mercury, sedative and antiphlogistic treatment, is strongly contra-indicated, and would only widen and deepen the road to death.

In the treatment of diphtheria, arouse nature's sleeping energies with *the best* of stimulants and tonics, correct the vitiated secretions of the glands, neutralize the septicemia of the blood with *the most diffusible antiseptic* which is imperatively demanded; restore the struggling vitalizing forces, *is the treatment.* We should be decisive and prompt in our treatment, and not equivocate around in a chaos of doubt, which is calculated to worry and menace the thoughtful physician.

I have noticed some cases in which the toxic influence of the blood seemed to have an overwhelming influence on the heart and nervous system, and the patient died as of asphyxia (some would call it heart clot). In the local congestion of diphtheria, the whole system shares in the depression and enervation, and if the case proves fatal, by a powerful action upon the nervous system, the patient never rises out of the prostration. I have often been deceived by the insidious approach and hasty death of some cases of diphtheria.

When my apprehensions were that an early dissolution would take place, I remained with my patient and noticed *all the manifestations* in the *moribund state*, and often the nervous system was brought into great confusion by comparatively slight exciting causes, and the functions of respiration and circulation thrown in great disorder, all premonitory of death. The fœtid sanies from the nostrils, and the offensive slough, and acrid flow

rom the tonslis are indications of a low state of vitality, and why do some physicians claim diphtheria is sthenic? The fever in diphtheria is only *symtomatic*, and indicative of prostration; and the arborescent manifestation on the tonsils and adjacent parts are only manitorial of the melanotic condition of the tissues *within*.

Notwithstanding the humoral pathology of Boerhave and Stahl and the refutation of Hoffman and Cullen, there is a chemical condition which eludes our treatment. In diphtheria *pre-eminently above all claims*, give diffusible antiseptics and oxygen; and in great prostration of all the nervous system give the best preparations of phosphorus. Give an *abundance* of sunlight and pure air, for they are imperatively demanded to assist in the oxidation of the highly carbonated blood, and elimination of alkaline carbonates; cleanse the sloughs with carbolized glycerine.

Why is it a baby before dentition cannot be ptyalized? Why are babes at the breast before dentition exempt and bear perfect immunity from diphtheria?

Because there is no saliva secreted the first several months, and the functions of the parotid glands are not throughly established and they cannot eliminate ptyalism and diphtheria: Gentlemen, this was the initial idea upon which I have predicated all my investigations and treatment. After the parotid or maxillary glands have matured enough to perform their normal functions, *then they are capable* of mobilizing or eliminating the virus of diphtheria or ptyalism.

I consider the glandular system an incubitis, and important factor in the formation of many diseases.

At this eventful period of medical history, there are some who dare deviate from the long beaten track of prejudice, and venture where professional pride and native cupidity were averse to the true spirit of Justice and Reform.

It is not my wish to cast imputations and heap epithets upon the medical profession, but let us be constantly alert to the gross blunders so justly the opprobrium of the profession.

Every person entering upon the stage of professional duty should thoroughly qualify for the honor and trust; for the life, and care of the physician are constantly in the solitude of Death's damp shades. Alas, how often pretentions are received as evidences of capacity! If we cannot eradicate disease, let us quicken our thoughts and vivify our faith to alleviate the sufferings of humanity.

Article LXXIII.

Medicine.*

To calm the woes of human kind,
The men of philanthropic mind
For ages past, have been inclined
With great consideration.
That they have failed, to some extent,
Can be no great disparagement;
For, ever with the best intent,
They have adorned their station;
And, to the midst of pain and woe,
Meet for faint mortals here below,
Brought succor and a gladsome glow
Of peace and consolation.

A glorious mission has been theirs,
Through the long line of passing years,
Out of our sight, 'mid smiles and tears,
Forever drifting, drifting.
Now joy and hope, now grief and woe,
Around, above; we see them go
With steady step, serene and slow,
As life's strange scenes are shifting.
On, on and up, toward the goal
Where glory waits the faithful soul,
When our great earth shall cease to roll
And morning is uplifting.

A glorious mission is our own;
More glorious than the world has known;
For we have largely overgrown
The stature of *their* learning.
But, if our ardor would be blest,
Each should contain within his breast
A strong desire, a vague unrest,
A constant, mighty yearning.

* A Thesis submitted to the Faculty of the Missouri Medical College. By one of the youngest of the Class of 1882.

Each of us has his place to fill
And each can *fill* it, if he will:
Our work will be for good or ill,
So long as we are living.
Long as our pulses beat and play,
We must press forward on our way
And toil and strive by night and day,
The woes of man relieving.
Is not our work a glorious one?
Is not the race we have to run
The noblest underneath the sun?
We labor on, believing.

When moves the battle's martial line,
And bloody sabers flash and shine,
And wreaths of powder-smoke entwine
The columns rent and gory;
When, from brave hearts, with plash and spout,
The crimson life-blood gushes out,
And thousands, trampled by the rout,
Lie on the field of glory;
The surgeon, with his skillful brain
And gentle hand relieving pain,
Seems as one sent from Heaven's train,
To close the dismal story.

When, gliding swift, from strand to strand,
With ghastly face and icy hand,
The pestilence pervades the land;
So slyly, surely creeping
Upon its victims; and the wail,
The frozen hearts, the cheeks all pale,
The souls that feebly quake and quail,
The grief and woe and weeping
Bespeak that Death, grim foe, is near;
And that his victims, on the bier,
Or in the earth's embrace so drear,
Eternally are sleeping:
Then our brave brethren, bless them all!
Stand round the poison-breathing pall,
Where they, alas! too often fall,
Their faithful vigils keeping.

In the lone sick-room, when the heart
Beats slowly, feebly, and the dart
Of Death is raised to strike apart
The soul and frame forever;
When the death-damp stands on the brow,
And the faint breath comes weak and slow
And the dim eye is glazing, Oh!
How strong hearts shake and quiver.
But the physician, cool and calm,
Whose presence gives each bruise a balm,
Stands by to watch, without a qualm,
The spirit cross the river.

No longer talk of heroes proud,
Who wake the earth with thunder loud,
Whose fame rides in a glowing cloud,
Where wrath and strife are gleaming.
No longer prate of those whose bands
Waste cities fair and fruitful lands
In fell destruction, and whose hands
With crimson blood are streaming.
He, who serenely dies to save
His fellow man, is far more brave,
And rests within a *nobler* grave;
Though humbler far its seeming.

Such are the men whose deeds are wrought
For feeble honor, dearly bought;
Whose path through life is daily fraught
With danger and privation.
Such is the work, brave work and true,
That stretches out before our view,
And is entrusted to the few
Of our beloved profession.
Such the rewards, which are to be
Bestowed on us, if only we
Will labor conscientiously
To fill our situation.

Original Lecture.

Article LXXIV.

Lectures on Fractures and Dislocations. By Jno. T. Hodgen, M. D., Professor of Special Fractures and Dislocations and Surgical Anatomy, in the St. Louis Medical College.

III.

Repair of Fractures.

When a bone is broken, the medullary membrane, the periosteum and the tissues immediately about the site of fracture, with their bloodvessels, are more or less torn.

The blood from all these sources is immediately poured out between the broken fragments of each of the tissues, and finds its way in the direction of least resistance in the connective tissue to distant parts. Thus it occurs that a part of the blood poured out is strained through the meshes of the connective tissue, and the serum retaining its liquid form passes farther from the site of rupture; a few red blood-corpuscles squeezed from the forming clot are carried by the serum to the skin, giving rise to a discoloration of greater or less intensity, at a greater or less distance from the site of injury.

At the time of an accident, there is more or less depression of the vital powers, known as shock. If the injury has not been too severe, the shock soon passes, and there occurs a rebounding from the depression, followed by more or less fever with a general rise of temperature, and a general increase in the rapidity of the circulation.

The local rise in temperature and increase in vascular flow is greater; indeed, a degree of local inflammation is established, which may and generally does result in the pouring out from the bloodvessels of inflammatory products; and this adds to the swelling, which in the beginning was due alone to the extravasation of blood in the part. While this pouring out of the liquor sanguinis and white blood-corpuscles is taking place, the

more fluid portions of the extravasated blood are being taken up by the bloodvessels, the white and red blood corpuscles remaining entangled in the meshes of fibrillated fibrin, form with the fibrin a clot which, as the liquid elements disappear, becomes more and more firm.

The connective tissue elements, disturbed by mechanical irritation, fed by an increased supply of nutritive material, derived in part from the extravasated blood, and in part from the exuded material, begin to proliferate more rapidly, and these new born connective tissue corpuscles, mingling with the white blood-corpuscles of the inflammatory exudate, become active agents in the processes of repair. The red blood-corpuscles break down, liquify, and are, no doubt, in part assimilated by the rapidly multiplying and hungry connective tissue corpuscles, while those portions not fit for, or not required in the reparative process are taken up by the bloodvessels and mingle with the blood current. Thus it is that new connective tissue finally occupies the site of extravasated blood within the medullary cavity, between the fragments and in the connective tissue, about the fractured parts. And this is the first material, properly speaking, which unites the fragments. This would be called callus, a general and very indefinite structure, morphologically considered. Generally this new connective tissue becomes mingled with cartilage-corpuscles, and we then have the bones united by fibro-cartilage, still known as callus. Or the process of ossification may occur without the previous general infiltration with cartilage-corpuscles. In this condition and at this stage, the connecting mass is still known as callus. In most cases, however, especially in the bones of old subjects, and in the more dense parts of young skeletons, the fibro-cartilage is infiltrated with calcareous matter, first about and between the cartilage-corpuscles, becoming at this stage a calcifying cartilage; and later, the outer parts of the cartilage-corpuscles become infiltrated with lime salts, spaces corresponding to the nuclei of the cartilage-corpuscles are left, while canaliculi diverge from them into the surrounding calcifying matter. Thus leaving the lacunæ and canaliculi occupied by the bone-corpuscles and now for the first time the new bond between the fragments ceases to be called callus, and is a bony bond between them.

While the changes above described are taking place in the blood, and inflammatory products poured out at the site of fract-

ure, and in the vessels and connective tissue in the immediate neighborhood, important changes occur in the bone itself. As a result of the mechanical disturbance of the bone, an inflammatory process is set up by which leucocytes and the liquor sanguinis are poured out in the connective tissue within the Haversian canals, between their calcified walls and the blood-vessels lodged in them. Either from the formation of lactic acid, or from the presence of leucocytes or through some other agency, the lime salts forming the infiltrate of the bony structure, as well as the so-called animal matter disappear, this process resulting in an increase in the size of the Haversian canals, and leaving the bone more porous.

This process of absorption goes so far in the parts next the line of fracture, and especially in that portion of the bone nearest the periosteum, that the broken ends are not only softened but also rounded off. Hence it occurs that if a fracture be manipulated at this period, notwithstanding the fragments may be rubbed one against the other, no crepitus is felt, for the soft cushion thus left prevents the calcified ends of the bones from coming in contact one with the other. At this period also if extension be not maintained, the bone becomes shortened, although the fragments may not pass each other and though no angling may occur.

Early in the process of union the periosteum becomes succulent, the connective tissue layer next the bone becomes infiltrated with inflammatory products, thus lifting the pregnant periosteum from the bone. The identity of the periosteum is lost in the infiltrated tissues and is not again recognized as a distinct membrane until, if the union occur by the intra-cartilaginous method, it appears on the outside of the fibro-cartilaginous mass which surrounds the broken ends of the bone, or, if the union be by direct ossification, the periosteum covers this bone and is continuous with that covering the original bone. But as the new bone in most cases surrounds the old beyond the line of fracture, the old is directly continuous with the new, and of course the periosteum does not come in contact with the old bone directly at the line of fracture. Ossification first makes its appearance in the plug which fills the medullary cavity and in the ferule of new tissue about the broken ends and later between the broken fragments.

In simple non-suppurating fractures the callus is usually

infiltrated with cartilage before ossification begins, whereas, if there be much inflammation and suppuration the granulation tissue ossifies without the intervention of cartilage. In simple non-suppurating fractures, the plug in the medullary cavity is calcified in the centre without previous formation of cartilage; the peripheral portions first become cartilage. If a part of the bone has been lost, the callus filling the space is not first transformed into cartilage but is directly converted into bone.

The sub-periosteal layer of connective tissue alone seems to be concerned in the formation of cartilage, while the medullary membrane and connective tissue of the Haversian canals are concerned in the formation of bone. Recent experiments in transplanting medullary tissue in dogs, shows that, bone eventuates at the new sites both by direct calcification and by the intracartilagenous method. The above description of the mode of union of fractures must be modified to express the exact pathological conditions in many cases. Thus in fractures of the skull, as a rule, there is nothing that can be regarded as an ensheathing callus, or in fractures of the bones of the face where no motion is permitted. Again, fractures are said to unite immediately, as the soft parts by the process known as that of immediate union, in which it is said no new material occupies the line of injury. Now, while incised wounds in soft parts and perhaps fractured bones do sometimes unite very quickly, the union can hardly be immediate in regard to time or the absence of intervening material.

Bones are sometimes united by an ensheathing callus and a medullary plug which becomes ossified without a corresponding uniting material between the ends of the fragments. In the museum of the St. Louis Medical College is a specimen in which this is shown, the callus holding the fragments in proper relationship, while there is no bony material between the fragments at the line of fracture. Yet this may be a case in which there would finally have been a deposit, had the patient not died when he did.

The amount of callus or new bone that binds a fractured bone will vary greatly as to the quantity of the new material as well as to the position it occupies. The amount and position may depend on the character of the periosteal relations. Thus on the front and inner part, or what is known as the subcutaneous part of the tibia, there is frequently very little callus, while on

the posterior and outer part the deposit is abundant. This may be due to looseness of the connective tissue about the bone on its posterior and outer aspects, for here the condition is such as to allow the easy and abundant infiltration with inflammatory products, while on the subcutaneous surface the connective tissue is shorter and the areolar spaces less free: consequently infiltration is less easy and of course less abundant. Again, under corresponding conditions callus is larger in young than in old bones since the blood and inflammatory products more readily separate the periosteum from the bone, and more easily flow into the free spaces in the connective tissue of children. Perfect immobilization limits inflammatory infiltration, and consequently callus is less abundant if the fragments are kept at rest. The removal of callus by the absorption of the redundant portion gradually takes place, and if the adjustment of the fragments has been perfect, in time nothing remains to indicate the site of fracture. Not only, does the ensheathing callus disappear, but the plug which occupied the medullary canal is absorbed and the canal is re-established.

Where the fragments are illy adjusted, callus is unequally deposited, being most abundant at the site of contact of the fragments; thus it happens that in lapping fragments, which angle one upon the other, there will be an abundance of callus on the concave sides of the angle; and this material is precisely where it is most required to give strength to the union of the illy adapted fragments; If one end project beyond the other into the soft parts, no callus is deposited upon it. In such a case, absorbtion of the ensheathing callus takes place in such a way as to leave a strong brace at the receding angle of contact thus giving the fragments less appearance of displacement and at the same time making union stronger than by the deposit of a similar amount of new material at any other point. This deposit, I believe, is first determined by the greater irritation from the contact of one fragment with the other and is maintained by the purpose which it is made to subserve in supporting the bone in the performance of its special office when in use.

If such a lapping occur in which the end of one fragment rests against the side of another, the medullary canal is re-established by the absorption of the bony wall of that fragment against which the end of the other fragment rests. Under such circumstances the projecting end of the fragment most distant

from the point of union, having no office to perform in the support of the part becomes atrophied and is finally absorbed.

Thus it occurs that the weakest parts are made stronger and the unnecessary irregularities are removed. The union when completed is by a material arranged in all its details precisely as the tissue existing before the fracture and the bone becomes simply continuous again without the presence of scar-tissue a union more perfect than is ever seen in any other tissue except nerve tissue. The callus, then, represents the early form of cicatricial tissue and in its final disappearance no scar is left at the point of union. If however, the process is not completed, there remains a connection of the bony fragments by means of a tissue varying from normal and we have the various forms of pseudarthrosis to be considered in another lecture.

Clinical Lecture.

Article LXXV.

Thread Worms; Oxyuris Vermicularis.

Clinical Lecture to the Post-Graduates, Missouri Medical College Dispensary. By James P. Kingsley, M. D., Professor of Diseases of Children. [Reported for the Journal.] By Elmer L. Legge, A. M., M. D., of St. Louis.

The two little boys before us, aged five and six years respectively, complain of a persistent and troublesome itching of the anus, which gives rise to much nervous irritation and restlessness, especially towards evening and during the first sleep. This condition is due to the presence of parasites inhabiting the rectum, the oxyuris vermicularis or thread worms. These worms usually find lodgment in the rectum, though they may be found high up in the large intestines. Where these parasites are found in the lower bowel and about the anus, which are the most sensitive parts of the large bowel, they create considerable disturbance. If allowed to exist for a long time, they may interfere with the nutrition of the child. The boys before us are both strumous and therefore favorable subjects for worms.

These little worms are white in color and round, are nearly a quarter of an inch long, and about the thickness of a thread, the female worm is twice the length of the male. The eggs of the female are very numerous, and are introduced into the alimentary tract either in the food or by the child carrying its fingers to its mouth, as children are in the habit of doing. These microscopic ova are hatched on their way down through the alimentary canal and attain there full development in the large intestine.

Thread worms may exist in considerable numbers, and for a long time, in a child, without attracting notice by any symptoms, though they may be indicated by the conditions which may be local, general or reflex. The diagnosis is easily established when the worms are seen, or when their eggs are found in the

stools by microscopic examination. The most frequent symptom is scratching of the anus, especially at night after the child has become warm in its bed, an increased amount of mucus at that time favoring the movements of the worm. There are frequent attempts to evacuate the bowel, which, in many cases, results in the discharge of a small quantity of mucus. Often there is violent straining at stool until the bowel comes down, and the child suffers from the additional trouble of prolapsus ani. One of our little patients is in just that condition. At every attempt to evacuate the bowels there is prolopsus ani and the child cries for the mother to come and return the bowel, which she does by oiling the folds and pressing them back a with napkin.

Sometimes the worms migrate into the vagina, and there excite great irritation, inflammation of the vulva, leucorrhœa and menstruation. Reflex phenomena are very frequently manifested. In the male they may cause erection and occasionally balanitis, also pains upon micturition and defecation. I am at the present time attending a little girl who has had several epileptic attacks induced by thread worms. Nervous disorders are always aggravated by the presence of intestinal worms of every variety. Recently I was sent for to see a little girl, who had partial paralysis of the leg and thigh on one side. I was at a loss to understand the cause of the paralysis. During the second visit, after careful examination and inquiry, I was led to suspect the presence of thread worms. Appropriate treatment offered almost immediate relief.

Inasmuch as these parasites inhabit the large bowel only, usually the lower portion, they can readily be removed by the use of proper enemata. Various solutions and infusions have been used for that purpose. Solutions of carbolic acid have been used with advantage, but are objectionble in consequence of the irritation sometimes produced by the use of a solution too strong, as well as the possiblity of poisoning by absorption That plan of treatment which is the simplest, is the best one we can employ for young children. That treatment is the daily injection of two or three ounces of lime water into the rectum, together with an occasional administration of a mild purgative, either a teaspoonful of castor oil or one grain of calomel given rubbed up with five grains of sugar, at bed time. A solution of common table salt injected daily answers an admirable purpose. When there is a relaxed condition of the muscles of the bowel,

as we see in one of these cases before us, which is indicated by the protrusion of the bowel during straining at the stools, an astringent injection should be used. In such cases, I make use of the following injection:

℞ Ferri sulphatis.....3i
Infus. quassiæ.....Oi
M. S. Fiat enenes. Inject four ounces every morning.

The infusion of quassiæ alone is an excellent remedy.

For the other little patient before us, it will be sufficient to direct the mother to use a daily enema of lime water. We must not, however, forget to instruct the mother to remove with a wet sponge or cloth all the parasites she can find each day, from the folds about the anus. She must do her part thoroughly, else the worms in the folds of the sphincter, after washing them out of the rectum, will not be removed, and the treatment in part defeated.

The intolerable itching which so frequently occurs after the patient has gone to bed, may be effectually relieved by an application to and within the anus of the following ointment:

℞ Iodoformi.....3ss
Unguenti oxidi zinci.....3ss
M. S. Fiat unguent. Apply at bed time

In addition to local treatment, tonics are usually required, more especially in strumous children, such as are here represented. The preparations of iron are decidedly beneficial in these cases. I would advise for these lads, five and six years respectively, one teaspoonful of the bitter wine of iron after each meal.

Translations.

Article LXXVI.

FROM THE FRENCH.

Excerpts from Late French Journals. [Translated for the Journal.] By A. H. Ohmann-Dumesnil, A. M., M. D., of St. Louis.

Supplementary Placenta.—M. Tarnier had a woman in his service who had just been delivered, and the placenta seemed to be still adhering by a membrane when a renewed effort at expulsion brought a second placenta, adhering to the first by the membrane, and weighing 140 grammes, the weight of the first one being 410. It would have been an easy matter to suppose the woman delivered, the second placenta still remaining in the uterus; in this case the fact might be supposed by an examination of the membrane, retained in the uterus, as it contained a certain number of blood-vessels. Tarnier recalls the utility of the procedure which he recommends to his students, when a portion of the membranes resists the tractions made upon them. He recommends never to use force, but to apply a ligature about the membranes as is done with the umbilical cord. This ligature is useful to extract the membranes during the following days.—[*Journ. de Méd. et de Chirurg. Prat.*

Action of Aspergillus Glaucus.—Dr. Kaufman has made a series of experiments on rabbits and arrives at the following conclusions:

1. The ingestion of the spores of aspergillus glaucus in the digestive tube produces no toxic effects, that is to say they contain no poison that can be absorbed.

2. These spores do not germinate in the digestive tube, and do not penetrate the mucous membrane to enter into the circulation. They cannot, therefore, infect the economy by this means. Had any spores passed into the blood they would be found in lesions of the kidneys, but these have not

been found to present the white nodule characteristic of infection.

8. The inhalation of spores is dangerous and may cause pneumonia of a more or less severe character.—[*Lyon Médical.*

URIC ACID CALCULUS.—LITHORITY.—CURE.—Dr. A. Picard had a case of a man æt. 56, affected with vesical calculus. The stone was over six centimetres in diameter, and its composition was uric acid. Eleven sittings were necessary to effect a crushing of all the fragments. The author believes the case to demonstrate:

1. The possibility of crushing a hard calculus of more than six centimetres in diameter, despite its fixed position above and behind on the latral part of the neck of the bladder. The volume of the calculus might have made incision preferable; but it would have been dangerous to administer chloroform to the patient, as he had emphysema; and, the impossibility of anæsthesia, joined to his cowardice were sufficient to reject this operation.

2. The introduction, which is relatively easy, of a lithotrite whose beak was a centimetre wide and its extraction, although clogged, was effected without stoppage at either the urethro-vesical orifice or at the bulb.

3. The hammer is useful even when a screw lithotrite is employed.

4. Fenestrated jaws are inconvenient even when the fenestra are short and narrow. The instrument becomes clogged up much more easily than when no openings exist.

5. If fenestrated instruments are used, the fenestra should be large in the crushing of large calculi.

6. It is expedient in such cases to follow Thompson's practice, using several lithotrites during the same sitting.

7. The danger of exercising traction upon the meatus is great and an access of very grave fever must follow.

8. There is a possibility of having fruitless sittings, despite the presence numerous fragments.

9. There is no utility in injections when the patient is able to retain his urine.

10. There was absence of prostatic calculus although the sen-

sation furnished by the instrument, when passing over the prostate, and the pain in the lower part of the rectum felt by the patient, would lead to suspect its presence.

11. There was a persistence on the part of the fragments to lodge in the pouch originally occupied by the calculus, above, behind and to the right of the neck of the bladder.—[*Progrès Médical.*

STATE OF OPTIC NERVE AND OF RETINA IN AN ATAXIC.—M. Poncet, of Cluny made the following communication to the Société de Biologie:

The histological examination of the nerve and of the retina exclude the idea of a peripheral lesion such as a primitive sclerosis, and proves that the origin of the blindness of ataxic patients is of central origin—is a cerebral lesion. In a patient, ataxic and blind for ten years, who died at Bicêtre, the following lesions were observed: In its cerebral portion the optic nerve presented complete fatty degeneration; colorless vesicles, granulations without hypertrophy of the neuroglia or of the prolongations of the sheath, no multiplication of the cells of the neuroglia. In its orbital portion, the optic nerve presents the fatty granular or degeneration to the same degree; but here the fibrous prolongations of the sheath were hypertrophied, a perivascular sclerosis existed. The cells and fibres of the neuroglia presented no hypertrophy. To sum up, the sclerosis was rather relative than real; it was due to accumulation of connective tissue after degeneration of the nerve portion. In the retina the fibres of the optic nerve and the ganglionic cells were destroyed; all the external layers, including the cones, were normal.—[*Ibid.*

STATISTICS IN REGARD TO ANTISEPTICS.—M. Monod in a discussion in regard to the comparative effects obtained with and without antiseptic treatment in operations presents the following, collected from reliable and authentic sources:

The	antiseptic	treatment	yielded	in	321	simple cases,	14 deaths.
"	"	"	"	"	96	complicated "	57 "
"	"	"	"	total,	417	cases and	71 "
"	old	"	"	in	377	simple cases,	110 "
"	"	"	"	"	84	complicated "	68 "
"	"	"	"	total	461	cases and	178 "

These figures speak for themselves. If in both instances, pye-

mia is taken out as cause of death the mortality is equal, being about 3 per cent., which proves that formerly it was pyemia that was a prolific source of death and that antisepsis has in diminishing the occurrence of this, rendered deaths following operations less frequent.—[*Gazette des Hôpitaux.*

OLD DISLOCATIONS.—M. Polaillon, after having given a history of subcutaneous section of adhesions for the reduction of old dislocations of the arm, arrives at the following conclusions:

1. When a dislocation has resisted tractions, ranging from 200 to 300 pounds, it is expedient to practice subcutaneous sections of the adhesions.

2. This must be done with antiseptic precautions.

3. A puncture with a sharp bistoury is made about one centimetre above the summit of the acromion process; through this a dull tenotome is introduced and the old adhesions are cut, then the posterior and superior, if necessary.

4. Three days later, the tractions may be renewed. Care must be taken not to interfere with the brachial vessels.—[*Paris Médical.*

ARTIFICIAL CURARE.—M. Rabutean has succeeded in producing a new compound, a white salt, of bitter taste, soluble in water and alcohol, whose physical, chemical and physiological properties are similar to those of curare. It is iodide of methyltriethylstibonium corresponding, in the grouping of its radicals, to iodide of ammonium. Its formula may be expressed as follows: $(C\ H_3, C_2\ H_5, C_2\ H_5, C_2\ H_5.)$ Sb, I.

In a chemical point of view, this new compound acts like iodide of potassium; it turns blue in the presence of starch and is capable of furnishing an oxide. In physiological experiments it is impossible to recognize the presence of antimony; the metal is intimately combined with the alcohol radicals and the base of the new salt acts like a simple body.

In action, as above stated, this new body acts like curare, destroying nervous excitability, whilst muscular contractility remains.—[*Progrès Médical.*

WHEN MATE IS TAKEN in large doses, it modifies considerably the gases of the blood. Carbonic acid and oxygen diminish to an enormous extent; they may be reduced to one-third or even

one-half of the normal quantity, so say Couty and d'Arsonval.

PASTERNATZKI HAS MADE experiments which show that the epileptic attacks produced in dogs by the essence of absinth depend upon the cortex of the brain. It is a true cortical epilepsy. The injection produces, at the same time, hallucinations; these probably do not depend upon an alteration of the psycho-motor zone, which is generally considered as producing them.

M. DEJERINE HAS examined the structure of the cutaneous nerves in pellagra, and has always found an alteration in the tubes which is constant. A large number of nerve sheaths are empty and very few tubes remain sound. The process of the alteration, he is led to believe, is very slow. At all events it permits us to regard pellagra as a disease of trophic origin.

M. OZANAM BELIEVES that a permanent cause of the progress of the blood in the veins consists in the influence of the satellite artery whose beats compress the vein and empty it in the intervalvular space situated above. This would seem to be a very constant work of propulsion.

M. TOUSSAINT'S EXPERIMENTS demonstrate that in *charbon* the immunity acquired by the mother, through vacination, is communicated to the fœtus. If the vaccination takes place during gestation of the sheep, the lamb will certainly be safe; if it takes place before, there may still be immunity.

M. VULPIAN has reported a case of paralysis of the arms produced by the use of crutches, which were not padded. Sensation and functional activity of the skin as well as circulation remained intact.

DR. SOREL RECOUNTS the case of a child, aged two and a half years, which had roseala followed by convulsions. These were followed by aphasia, which was of but an hour's duration, and accompanied by some paralysis. In two days recovery was complete.

M. LACAILLE claims to have obtained several cures of yellow fever by employing carbolic acid and carbolate of ammonia.

Proceedings of Medical Societies.

Article LXXVII.

ST. LOUIS MEDICAL SOCIETY.

Saturday, March 4th. 1882.

Resection of the Stomach.

Dr. Borck.—Some time ago Dr. Lutz read a paper on resection of the Stomach and the question was asked: Is it advisable to perform resection of the stomach for ulcers, and whether it had ever been done. In the *N. Y. Medical Reeord* for February there is recorded a successful case of resection for gastric ulcer, and if you so desire I will read it.

Dr. Borck read as follows:

"On November 21st. 1881, Dr. Rydygier of Kuhn performed the operation of partial resection of the stomcch in a case of perforating gastric ulcer with dilatation. The fact that the patient has, up to the present time been greatly benefitted, gives some justification for this most radical and venturesome mode of treatment; but the operation as thus applied in a new class of disease may, in a certain degree, be considered an epochal one. The patient was a married woman 30 years of age. In 1876 the first symptoms of gastric trouble came on, but they were not so severe until the beginning of 1880. She then commenced to have acid eructations and frequent vomiting. In February she vomited blood and had bloody stools, After that date the vomiting kept up in a regular manner. The patient for a few days would feel tolerably well, the abdomen would increase in size, then she would be feverish, and feel bad for a number of days; finally the whole culminated in attacks of vomiting, in which the stomach emptied itself of eight or ten quarts of liquid and solid matters.

"When the patient was examined previous to the operation the bodily organs were found to be healthy with the exception of the stomach. Five litres of water were poured into this organ, and its boundaries well marked. The greater curvature

reached to the symphysis, the lesser to a point just above the navel. The diagnosis was: ulceration of the pylorus and a dilatation of the rest of the organ.

"The patient was prepared for the operation by daily washing out the stomach with salicylic acid water. The details of the operation are given by Dr. Rydygier with great minuteness in the *Berliner Klinische Wochenschrift* where the case was reported.

"The abdominal wall was divided in the linea alba for the distance of ten c.m., the larger half of the incision being above the navel: the drawing out of the pylorus was then accomplished with no great difficulty. The separation and removal of the diseased part was, however, attended with much trouble and delay. The pylorus was immensely thickened, and firmly bound posteriorly to the pancreas, so that a portion of that organ had to be removed, as also some of the omentum. The whole pyloric sphincter with part of the posterior wall in which lay the ulcer was removed. The piece measured anteriorly, 1. 7 c.m.: posteriorly 6 c.m. in length. It contained the pyloric orifice, whose lumen just admitted a number 9 bougie. The ulcer was two thirds of an inch deep and nearly two inches long.

"The stomach was united to the duodenum by 12 internal and 29 external cat gut ligatures. The lines of union were powdered with iodoform.

"The progress of the patient after the operation was almost uninterruptedly favorable. There was little vomiting for the first few days. Food was taken by the mouth: two days later there was a passage from the bowels. The temperature rose at times to 102° or 103°.

"Six weeks after the operation there had been no return of the attacks of vomiting, the digestion was good, and the patient was reported to consider herself well.

"Dr. Rydygier's operation must be considered a most brilliant feat of surgery, looked at from whatever point of view. There are, however, very few cases of gastric ulcer which present just the combination of pathological conditions which might indicate resection. The actual permanent benefit of the present operation has, also, yet to be determined. The regulating action of the pylorus is likely to be interfered with, and pyloric incontinence, as Ebstein has shown, is a condition which may excite many bad symptoms."

Is Chronic Nasal Catarrh Curable? By Thos. F. Rumbold. M. D.

Mr. President: My apology for occupying the valuable time of this justly celebrated Medical Society, is more the importance of my subject, than of what I am going to say upon it.

The importance of studying chronic nasal catarrh will be conceded, when we take into consideration the immense number of persons in the world who are afflicted with it. I am very certain that this disease and the complaints resulting therefrom, represent more suffering than is represented by any other disease that we are called upon to treat, yet Sir, I am sorry to say that this class of individuals receives, from our profession less sympathy, less aid than does any other class of patients. Having been discouraged, by their own medical adviser, who belittled their complaint after failing to afford them the least relief, and having experimented with one after another of the numerous nostrums advertised in the public prints, they go flitting from one physician to another endeavoring to get rid of their ever present distress. Generally, they gradually become worse in consequence of the continually increasing severity of the disease which almost always involves and impairs some important organ, and sometimes from efforts, honestly though erroneously made, to quickly cure them by local applications that are more or less irritating in their effects.

Is Chronic Nasal Catarrh Curable?

It is not possible to answer this by a single response, for the reason, that under certain conditions the answer is, no, most emphatically, and under certain other conditions the answer is yes; therefore an explanation must be given with either answer, and to do this properly, I will be obliged to give some of the prominent objective and subjective symptoms of acute and chronic nasal catarrh; this will enable me to state the conditions which determine the answer.

The word "catarrh" means "a running down," "a discharge from the mucous membrane, especially from the nose, fauces and bronchial passages."

The mucous membrane in the healthy state secretes only that quantity of mucus necessary to maintain its surface in a moistened condition. As there is no excess of fluid, there is none to flow away, in other words there is no catarrh. This being the case

any flow of secretion indicates that the mucous membrane is in a diseased condition. Therefore, every individual who uses a handkerchief to free his nasal passages of even a clear secretion, or, who frequently expectorates even small quantities of mucus has taken cold and has a catarrh. Quantity, however, cannot always be taken as an indication of catarrhal disease, as there are stages in which there is a less quantity of mucus secreted than is found in the normal condition.

To study the earliest objective symptoms of the catarrhal condition, or in other words, of a cold, we must commence with its earliest manifestations. This will take us back to childhood, even to infancy itself.

The earliest manifestations of a cold in the infant are increased flow of apparently normal mucus, and a slight increase of the color of the mucous membrane, soon followed by its becoming more or less thickened. From this stage, the morbid processes are characterized by conditions that are apparently very diverse. Sometimes the papillæ of the mucous membrane are temporarily enlarged, producing an irregularity of surface. With proper hygienic management, these swellings or irregularities pass away, leaving the membrane in apparently a normal condition, even after the discharge of a comparatively large quantity of muco-purulent secretion. Sometimes the character of the inflammation is still more intense, serous exadation takes place from the blood vessels into the surrounding structure, known as an infiltration of serum within the mucous membrane itself, or as œdema. Even after diseased action of such intensity (provided that no organs vital to the child's existence are involved) the inflamed parts will regain their normal condition, for the reason that the inflammation, while of so severe a type, must necessarily be of so short duration that it cannot produce any permanent change in the constituent parts of the mucous membrane, and, to produce a chronic condition, inflammation of a grade that is possible to last for a long time, must exist.

While giving some of the objective symptoms that are to aid us in determining the curability of chronic nasal catarrh, I wish to make note of some well-marked peculiarities in the expression of catarrhal patients, and in the absence or presence of certain symptoms. I think that these expressions and symptoms—which vary in different aged patients—may assist in indicating the stage or the curability of the disease. The conclusions I

draw from my observations are the following: 1st. If chronic inflammation of the mucous membrane has not produced painful sensations recovery is possible. 2nd. If the inflammation is of such an age that patients are made cognizant, by reason of various disagreeable symptoms, complete recovery is seldom to be expected.

I do not say that this absence or presence of pain or disagreeable sensation can be uniformly taken as a correct guide, but that it can be noticed in the majority of cases. Of course, I have had patients who though sixty years of age, had chronic inflammation of the nose, throat and ears of the most persistent form, but had not experienced a single disagreeable sensation nor did they receive even the least benefit from treatment, and others, who were quite young, that had experienced great pain in all the inflamed parts, yet recovered completely, but I think that these instances are the exceptions.

It is not until the age of from three to fifteen years is attained, that we see the effect of long continued diseased action in the enlargement of the tonsils or in the perforation of the membrana tympani. But even in this stage of catarrhal disease, if the patient is properly taken care of, without medical aid, every sign of inflammation and of the perforation of the drum-head will disappear.

All patients, up to the tenth year of age, are unconscious of an exposure that they think might result in a cold being taken, they are oblivious to the dangerous seqnences of exposure. Never in my life have I known a child of this age say that it has taken a cold. They do not know the full meaning of the expression. They will know whether they have or have not been out of doors without their usual clothing, they will know if they have been chilly in a cold room, or in a cold hall, or in a wagon or carriage, but they cannot give one subjective symptom of a cold, such as is so frequently given by those who are several years older, and, with many of them, were it not for the objective symptoms, it would not be known that they had taken a cold. But on examination of the nasal and faucial passages after the catarrhal secretion is removed, we see a degree of inflammatory action, that we know must have required several years of taking cold to have produced it.

This indicates that the grade of inflammation must have been so mild in character and so slow in action that the earliest symp-

toms have passed unobserved by either the parents or the patient; this is known by the latter not having any disagreeable sensations of which to complain. The symptoms, if any, will be noticed by the parents, not by the child, the former may observe the child breathing with its mouth open, or that it may require the frequent use of a handkerchief to free its nasal passages, but the greater hardship that the child experiences is the act of blowing its nose in obedience to its parent's direction. I do not say that some of them may not have headache and earache, and severe ones too, but this happens in one case out of about 20 or 30.

I believe that one half of these patients will recover completely, if proper hygienic measures and domestic remedies are employed, and almost every one of them will recover if placed under proper medical care. It is with this class of patients that we first see an unconsciousness of the complaint and a possibility of complete recovery of the chronically inflamed mucous membrane in the same patient.

It is not until patients have attained to about their fifteenth year, that they begin to relate subjective symptoms of a slight nature, still they will say they do not know that they have taken a cold. If their subjective symptoms are marked, it will be seen, on inspection that their objective symptoms are equally as well marked; but it is very seldom that we have patients of this age, who relate marked subjective symptoms, and my experience warrants me in saying that fully 95 per cent of uncomplicated cases are curable.

At about the twentieth year of age they begin to take ordinary precaution to prevent colds. Many times they do so more from obedience to their gaurdian's instructions, than because they have learned from experience that it is conducive to health. Yet very few of these patients are at all certain that they take cold on exposure; they know at times that they have experienced chilly sensations up and down the back—a symptom very seldom mentioned before this age—but as soon as these sensations have passed away, they are forgotten. Their subjective symptoms are seldom painful. The blood vessels while plainly visible, are nearly straight in their course; the glands still retain their functions of secreting muco-purulent matter, consequently there is an abundance of this secretion: on the surface of the mucous membrane, all of which indicate that restoration is still

possible. Almost every one of these patients whose ears, eyes, brain, stomach and lungs are not implicated, will, in time, recover their health, provided always, that they live in obedience to those hygienic laws which they have for many years been infringing upon, and at the same time place themselves under proper medical care. However, I am led to believe, from information received through my patients, that some of these cases do recover simply upon the observance of the laws of health; and I found upon investigation, that it was those only whose subjective symptoms were of a very slight nature that did recover.

From about the twenty-fifth year to the thirty-fifth, patients will freely admit that they have very frequently taken cold; but the uniformity with which every cold had for many years apparently entirely disappeared, without any attention or care on their part, and without its leaving any sensible bad effects, have lead them to believe that the affection was a temporary inconvenience only.

This class of patients is very large, being about one third the total number treated. To them we are indebted for the prevalence of the exceedingly erroneous, but very generally entertained belief that colds are of trifling consequence. This belief is held not only by the laity, but by a large portion of the medical profession of equal age. The expression made by the class of patients concerning their symptoms, plainly indicate their ignorance of the nature of colds, and of the complaint originating from them. While relating their sensations, they will say: "I thought it was only a cold and would soon go away, as it has done many times before:" or "My physician said it was nothing but a cold in the head, which would pass away on taken some opening medicine;" or, "This cannot be a cold but it acts like one, at least it is not like the colds I have had before; my colds always go away, I know this from past experience."

To this class of patients the physician *must*, if he regards his reputation, give an answer that is modified by numerous conditions, for the inflammation in their nasal cavaties has been maintained long enough to have produced a change that may prove to be permanent, even after the most skillful employment of hygienic and therapeutic measures. And even in the successfully treated cases, as it took many years for the congestion to produce this condition, time will be required for the reparative processes to return it so far toward the normal condition that

the patient will not be conscious of the presence of the disease. Even this degree of restoration cannot be performed in a few weeks, or in a few months, simply because the changes in the mucous membrane have been too great for relief to be effected in so short a time.

After catarrhal patients have arrived at their fortieth year, they begin to take *more* than ordinary precaution against exposure to colds and at this age they voluntarily say that they take cold even when they do not expose themselves in the least, and that they cannot avoid taking cold even when they do their utmost to prevent it.

With this class, and all those who are older, the inflammation is of a much more permanent character, therefore a promise of a complete cure ever being made, cannot be given.

The question may be asked why cannot these patients be cured by several years of observance of appropriate hygienic and therapeutic measures? The answer is: the reparative powers of nature are not equal to the task of converting abnormal structure into normal structure. The blood-vessels, nerves, glands, etc., have become so changed that it is not possible for them to be transformed to their former healthy condition, by any kind of treatment, even should it be continued during the remainder of their life.

While this is true, it is possible to so treat this class of patients by a few appropriate applications each fall or spring, that they can be maintained in such good health that they will experience but little annoyance from the complaint; sometimes their symptoms may be so much subdued that they will be unconscious of any affection in the head.

This is what I call *successful treatment* of this class of patients and in my opinion *this is* the most that can be done for them. When this *is* done, they live almost entirely exempt from the exceedingly distressing symptoms that this disease entails, but *not exempt* from future liabilities to attacks of cold, which if not immediately removed by appropriate therapeutic and hygienic measures, will again bring in even more than the former distressing symptoms.

To recapitulate: Up to the tenth year all patients will recover upon the obserance of hygienic laws and with constitutional and medical treatment of the simplest kind. Those from about twelve to twenty years of age will require more thorough

treatment, but every uncomplicated case can be cured in time. A little less than a majority of those patients from about the twenty-fifth to the thirty-fifth year, can, by close attention to *all* the hygienic laws and careful non-irritating medical treatment be cured, while the great majority of this class and all who are older, because of the permanency of the inflammatory action, and because of complication of other important organs, can be benefited only, and even this beneficial treatment must be made at each change of the season during life.

In conclusion, I will say, that the successful treatment of every patient may he likened to the successful suspension of a chain; if any one of its links are broken the chain drops. It may be said that one of the links dependant upon the successful treatment of this disease, is called protection of the head, neck, body and extremities: another link, danger of exposure to draughts and night air; another, maintenance of the nasal and aural passages in a clean condition, if catarrhal secretion is profuse; another, abstinance from the use of tobacco and spirituous drinks, and so on, through the whole list of hygienic and sanative measures, and the last and the least link called therapeutic measures. Now if any one of these links is broken—it makes but little difference which it is—success will not follow the treatment of such a patient.

DISCUSSION.

DR. PORTER.—This question has been discussed so repeatedly in the medical societies that there is little more to be said; and yet there are so many so-called new remedies, so many theories advanced, that it seems as if the undergrowth of the new had obscured the old landmarks, so that the medical practitioner is apt to get lost. There is nothing mysterious about catarrh; it is dependant upon simple conditions. Catarrh is not alone a disease of the nasal passages, but of the throat and any part where there is mucous membrane. Wherever you find it the same symptoms distinguish it. It is true that catarrh is not always accompanied by a discharge. There is dry catarrh, an ozœna of the nasal passages in which the secretion is evaporated almost as readily as it is formed. Yet in most cases of catarrh the discharge is the most noticeable feature. Very simple principles may be given for the treatment of catarrh, and there are

so few physicians who treat catarrh, yet I don't know any one who is unable to treat it if he will.

Some of the older members of the society will remember that one of our oldest and most respected members of the society, a man of large experience, asked the question of me in the society: "Are you willing to state that you have ever cured a case of catarrh?" I have treated cases of catarrh successfully, and done so by insufflation, with salt and water or some treatment of that kind. We should treat catarrh as we would treat inflammation of any other kind. And in the first place, no matter what is the age of the patient, we should keep the parts clean. There are many ways of doing it, and the simpler the method, the better it is. Then the discharges, and all obstructions by reason of hypertrophy or deviation from right lines of tissue must be corrected and proper applications must be made to the mucous membrane. There is no radical cure for catarrh, there is no specific. You, Mr. President, do not treat all cases of conjunctivits alike. Neither do we treat all cases of catarrh alike. So far as the local treatment is concerned, we should adopt some active and direct treatment, some very active treatment, especialy if there be ulceration—syphilitic ulceration often has a great deal to do with it. And not less important than any of these steps, and one that is frequently lost sight of, is the constitutional treatment. Very often in the so-called strumous subject, in which there is a tendency to enlarged lymphatics, probably the constitutional treatment is more important than the local treatment. Among the few things that have been added to our local treatmont is the new application of an old principle for the removal of hypertrophied tissue from the nasal cavity. Those members of the society who have examined many cases of nasal catarrh, find very often that the mucous membrane, blood-vessels, and nerves over the turbinated bones are enlarged. This enlargement is productive of trouble, perhaps because of the friction that there may be between the opposing surfaces, and because of the closing of the passage so that the passage of air to the upper pharyngeal space is intercepted. It is very necessary that this be removed, either by the application of certain agents to the mucous membrane, or by cutting it off with scissors or cutting forceps. Recently a very ingenius little ecraseur has been given to the profession, by Jarvis, of New York. Most of you have seen a description of it, no doubt. It is really an ingenius instrument, very easily

applied and very simple, and it at once commends itself to you, one of which I have here to-night.

I think this is the best way to perform this almost necessary operation: A small steel wire is passed through the ecraseur and a loop is formed and the ecraseur is passed into the nostril and around the mucous membrane over the turbinated bone which closes the entrance to the upper pharyngeal cavity, and then by slowly and carefully drawing the loop over the hypertrophied mucous membrane to remove it almost without pain, and sometimes almost without hæmorrhage. I have made personal observation in some cases, and I know that the instrument will be appreciated by the profession. It is simple and easy of application, almost any one can use it. I should like to say, before I sit down, that a good many physicians refrain from treating nasal catarrh by a common sense plan; all that is necessary is to use the same good sense that we do in the treatment of any surface inflammation, and we will succeed in the large majority of cases. Where gentlemen attain a reputation as successful practitioners in this specialty, it is probably because they take care of their patients and use common sense methods of treatment. A great many ideas come up, but if the common sense course is pursued, there will be little trouble in treating this disease, although as the Doctor says, some cases are incurable.

DR. MULHALL.—Dr. Rumbold's paper answers a question that I have no doubt every physician here to-night has been asked by patients: "Can you cure my catarrh?" The paper, as I understand, it is on the prognosis of catarrh; and the Doctor takes as the skeleton of his theme the history of the cases, dividing them into decades parhaps; presuming a man is 40 years of age if he has had the disease 25, 15 or 20 years, he bases his diagnosis on that. As far as my experience goes, and so far as the history of cases go, it seems to me that when a man has had catarrh 10, 15 or 20 years he is generally incurable; but I think we should always include the objective signs, and where we give a prognosis on the examination of the nose, I think we can divide the subject, roughly speaking, into two classes: those with atrophy; and those with thickening. In those cases where there is atrophy of the mucous membrane where the cavity of the nose is much enlarged, I don't mean where there is ozœna, but ordinary

catarrh, it is incurable; and all that he can do is to learn the use of the proper cleansing apparatus and detergents.

With regard to hypertrophy, I am surprised that Dr. Porter did not mention the most effective, easy and least painful method of treatment, the galvano-cautery. I have used Jarvis' wire snare and have broken six or seven wires in attempting to cut off a piece of dense tissue on the ends of an inferior turbinated bone. I have tried it a number of times. In one case I tried to remove a growth from the posterior ends of the turbinated bones, so much hypertrophied, that they met behind the septum, and the patient was unable to breathe through his nose. I didn't find much difficulty in getting the wire around these growths, but I couldn't get a wire strong enough, that would go through the Jarvis canula, to cut through this dense growth; Dr. Jarvis meant his instrument for polypi. The easiest method of cure is the use of the galvano-cautery, and the best electrodes for the purpose are those invented by Dr. Shurly, of Detroit. They are of different kinds, so as to reach every part of the nose. The operation is almost painless and is accomplished in a very short time, and almost always effects the purpose; that is, the re-establishing of nasal respiration. Those patients that have the nose filled with hypertrophied tissue, on having nasal respiration re-established, call themselves cured. They are not cured, but the difference between that condition and the re-establishing of nasal respiration is so great that they call themselves cured. I believe the nasal douche is getting out of use. If there be discharge, I usually teach the patient to use Warner's post nasal syringe to keep the nose clean. The use of it is very readily acquired, and I give chlorate of potash or salt as a detergent. When a man comes to me who is unable to breathe through his nose and who has a heavy feeling in the forehead, I feel pretty sure that when I get through with him he will say that I have done him a great deal of good. I use the spray sometimes for cleansing porposes. I don't care to go deeply into the subject of therapeutic measures, as the paper was on prognosis. I think Dr. Rumbold's paper is exceedingly well timed. It is the first thing that a patient wants to know: "can you cure my catarrh?" and in answering that question, Dr. Rumbold has certainly given us some valuable information; something that we may be able to tell our patients.

DR. PORTER.—I wish to say that certainly the galvano cautery

is exceeding valuable, but many patients object to its use, and the fact that electrodes have been broken in the nasal cavity, —although I have never broken any—has deterred me from using it. I have removed dense structures with this little instrument, and I think the fault must have been with the wire that the Doctor used. I used this instrument in removing a dense, hard tonsil from a patient who would not allow the use of the guilotine in any way, and as his time was limited I cut through the dense, hard tonsil with this wire, and had no difficulty at all. I have never broken a wire.

DR. MULHALL.—It was a steel wire. But the inventor of an instrument always has more success with it than any one else. That is the history of every invention. But even if we admit that we can get a wire that will not break, if the hypertrophy is of the middle portion of the mucous membrane of the inferior turbinated bones, as it often is, there is difficulty in passing the wire about and isolating the growth. If the growth is formed like a polypus with a pedicle, it is very easy to get the loop over it but nearly always they are diffused growths without apex or constriction and it is simply impossible to get a loop tightened about such a structure. It slips, and it is an impossible affair to effect our purpose. That is also my clinical experience.

Dr. Porter's experiences are strange and compel me to think that he has used Jarvis' wire snare in the affection we are speaking of but seldom, and the galvano-cautery not at all, nor can he have ever seen it applied, for in the proper method, indeed the only method of apylying the latter, there can be no possibility of breaking an electrode.

The hypertrophy is very often general and symmetrical, and naturally there can be no question of a loop. There must be lengthy, superficial destruction of tissue, and chemical agents are painful and insufficient as compared with the galvano-cautery. The only disadvantage in the latter, is the skill and practice required in its application inside the nose.

DR. WILLIAMS.—I did not get in in time to hear the Doctor's paper, but from the remarks that the gentlemen have made, I infer something of the position taken. So far as my experience is concerned my prognosis is nearly always based upon the length of time that the catarrh has continued; also upon the particular condition of each individual's nose: chiefly upon the

time since the inception of the disease. In a person with a long standing catarrh, of whatever form, the prognosis is unfavorable In a person with a recent catarrh, whether mild or severe, the prognosis is proportionately more favorable. Then again, the prognosis is more favorable in young people than in the old. Children and young people get well much quicker and much more easily than grown persons and old people. This fact is well established. The prognosis is more favorable in cases where there is hypertrophy of the turbinated bones, than where that condition does not exist. In cases where there is atrophy of the turbinated bones the disease is practically incurable. I have on hand now a lady whose turbinated bone is apparently entirely gone, and the cavity of her nose seems to be a little cavern instead of the ordinary passage through the nose. The mucous membrane of the nose is covered with a muco-purulent secretion and it is considerably swollen at the same time. This case is practically incurable. In case of hypertrophy of the turbinated bone the prognosis is more favorable. I am somewhat partial to the use of chromic acid in such cases. I have treated several cases of this kind during the past few years with good results. In some I have used the acid sufficiently strong to cause exfoliation of the turbinated bone, so that I removed spicules of bone afterwards. By this method I avoided an unpleasant cutting operation. I have not used the galvano-cautery, I am satisfied with the chromic acid. I have treated several cases in which the patient couldn't breathe through the nose at all, in this way, and they were very well satisfied with the result. In cases of children I am in the habit of using bicarbonate and biborate of soda more frequently, and it certainly acts very nicely, especially in young children with sniffling noses. It relieves for a time the secretion. I blow them in the form of powder well back into the nose. It makes a very good remedy for keeping the nose clean. My experience with solutions of all kinds have been unfavorable, I prefer to use remedies in a dry form, and especially if I can get them in a powder form. They are better than any kind of solution whatever. I think that if the gentlemen will use the biborate and the bicarbonate of soda, they will be gratified with the result. The use of the nasal douche has been given up entirely. I sometimes use what is called the catarrhal syringe; but I prefer the use of powders. It is a well known fact that even warm water poured into the nose is a decided irritant, even to the healthy

mucous membrane. In using cromic acid I roll a small piece of cotton on the end of a probe, or what is better, on a piece of stick, as the acid corrodes the probe, and pass the cotton through, a speculum. I use an ordinary ear speculum and make the application directly to the diseased part. I always use the reflector so as to see what I am doing; the remedy might otherwise get where we don't want it. I don't like the boracic acid as it is a decided irritant. Of course in using the chromic acid pure very small quantities must be used at a time; we must not use enough to allow it to run down the throat. There is always a little fluid in the bottle with the crystals, and I sometimes use that pure, make an application of it to the diseased part just as it comes in the bottle.

DR. FAIRBROTHER.—I want to inquire of some of these gentlemen who know a good deal about this subject, who make it a study, if, when there is a suspicion of syphilis, that does not enter into the consideration in treating the case; I would like to know if this doesn't enter as a factor in the prognosis of the case?

DR. MULHALL.—I think that Dr. Rumbold's paper referred to ordinary non-specific nasal catarrh.

DR. WILLIAMS.—I will say in answer to that question that if there is any suspicion at all of syphilitic trouble, the treatment must be constitutional; and in cases where there is positive evidence of syphilis the prognosis is still more favorable. They have to be treated constitutionally and not so much locally. In my previous remarks I referred to cases where there was no evidence, or suspicion of constitutional disease.

DR. RUMBOLD.—I do not wish, at present, to say anything about the treatment of catarrh, as that is not the subject of my paper. There are other conditions than those I have mentioned, that concur to make catarrh incurable, and chief among these is a syphilitic taint. Of course in those cases where there is a loss of bone substance, or even ulceration to a great extent, we do not expect to make a complete cure, even at any age. But if not over twenty, such amelioration may be given, that the patient will be unconscious of the inflammation.

DR. POLLAK.—I would like to enquire of Dr. Rumbold, what he uses to get rid of the fœtor in those cases?

Dr. Rumbold.—That is taking up another subject, but I will answer the question. Cases of this kind require the most careful and thorough cleansing. Their nostrils cannot be cleansed by an ordinary douche, or by a syringe of any kind, but by an instrument that throws a stream from the floor of the nasal cavity up to the highest turbinated process, and upon the under surface of each one of these processes. Even when this is most carefully and thoroughly done, the fœtor will not be entirely removed, as much of the decomposed secretion comes from cavities that cannot be reached by any means. As these cavities—the sphenoidal and ethmoidal—are secondarily affected, and as they recover only after the primary locality begins to recover, the fœtor will remain, but in a much less degree for from one to four weeks.

This is done by using warm salt water as the cleansing fluid, and by spraying a half drachm of vaseline with a very small quantity of carbolic acid, upon the turbinated processes, from behind the soft palate.

Dr. Pollak.—I don't understand how you can form vaseline into a spray?

Dr. Rumbold.—I can spray the whole of a tallow candle except the wick.

Dr. Pollak.—You must have it very hot.

Dr. Rumbold.—I will make it about from 98° to 101° F.

Dr. Hurt.—From experience and observation, I am under the impression that the fœtor proceeds either from a necrosed condition of some osseous tissue, or the inspissation of pus, which, drying, forms a scab of purulent matter which becomes adherent to the mucous membrane. Of course, the fœtor cannot be subdued until these conditions are corrected. The scab or the bone must be removed; and, so far as I know, we have no way of removing the scab, except by the douche or spray. If it could be reached, it might possibly be pulled away by force. I am not a specialist in catarrh of the nasal passages; but sometimes I am bold enough to undertake the treatment of these cases. I have used snuff with a great deal of benefit in some cases; I have also used ointments, and it has occurred to me that where I could reach the seat of the disease I have got the best results from the use of medicated ointments. They can be easily applied with a probe, and the probe can be bent in such a way as to follow the

track, or be diverted into any portion of the nasal passages. There can be a sufficient amount of cotton wound upon the probe to distend almost any portion of the cavity and smear it with the ointment. I have used iodoform in these cases. It is not very pleasant you know; but it is a good remedy for the diseased mucous membrane, it stimulates the reparative processes, and it is also in a certain sense a sedative. Another remedy I have used is oxide of zinc. I have also used bismuth in these cases.

DR. POLLAK.—I would like to ask Dr. Rumbold how he keeps his atomizer hot enough to spray vaseline; I could never do it?

DR. RUMBOLD.—The atomizer is passed over the light, which I use for illumination until it is probably 101° or 102° F., and as vaseline melts at 92° it becomes fluid at once, and then by means of the spray producer, I pass it back of the soft palate. The fluid may be raised as high as 120° or 130° F. before the spray is thrown into the cavity, and then when it is passed into the nasal cavity it will be at about 98° to 99° F. This is quite pleasant to the patient's throat.

DR. POLLAK.—What kind of atomizer do you use?

DR. RUMBOLD.—The atomizing tubes are made of glass. I have used this kind since 1866.

SATURDAY, MARCH 11. 1882.

Rational Therapeutics in Purulent Otorrhœa or Perforating Suppuration of the Middle Ear. By S. Pollak, M. D. Surgeon in Charge of the Eye and Ear Infirmary of the St. Louis Hospital, and of the Missouri School for the Blind.

The great prevalence of diseases of the ear and their frequency is often underestimated, because probably there is no part of the body where disease so often exists, uncared for by the patient and his ordinary medical attendant. This is especially the case among the lower classes of the community. Considerable impairment of the function of hearing may exist without interfering in any marked degree with their work or with their intercourse with another, and it is long before it is sufficiently serious in their estimation to require medical help. (BARR, *London Medical Record.*)

One of the most obstinate diseases to deal with is noteworthy Otorrhœa, or a chronic flow of pus or muco-pus from the ear.

The great Irish aural surgeon, Sir William Wilde, the father of modern Otology, said, thirty years ago: "So long as Otorrhœa is present, we never can tell how, when and where it may end, or what it may lead to." We are usually brought in contact with it, when the disease has been far advanced, when serious pathological changes have taken place. The seat of the disease is chiefly in the tympanic cavity, but sometimes in the antrum mastoideum, the mastoid cells, and the Eustachian tube. It is usually accompanied with, or is the result of constitutional disease; it is not only protracted, but also recurrent in its course. There is a popular notion even among physicians, that Otorrhœa should not or need not be interfered with, that it is vicarious in its nature.etc., and thus, this important and delicate organ of special sense, is suffered to be gradually but certainly destroyed from the want of appreciation of the disease, and the proper attention to it, at the outset. The question *shall* otorrhœa be stopped need not be considered now, but the question *can* we, or *how* shall we stop it is difficult to answer.

Before the use of the otoscope the membrana tympani was not accurately seen, still less the tympanic cavity. Even the auditory canal, except in its outer extremity is dark. Direct illumination dazzles but it does not light up the dark recesses. Hence most that has been done hitherto in otology, was a mere groping in the dark, like in ophthalmology before the days of the ophthalmoscope. With a good reflecting mirror, and an aural speculum the entire auditory canal and the membrana tympani, can be well seen, their physiological and pathological conditions can be studied as well as that of the ossicles; and if there is a large perforation in the tympanic membrane, the middle ear or tympanic cavity can be thoroughly explored. All, but the inner ear can be properly inspected.

From time immemorial *cleaning the ear with water*, was always considered the first step in the treatment of otorrhœa, and it is considered *absolutely indispensable now*. The auditory canal must be quite clean, ere the first satisfactory examination can be made. The laws of general surgery, obtain also in aural surgery. Foreign bodies, pus, fetid septic material must be removed, whether from an open surface, from a cavity or from a sinus. Wiping or swabbing with sponges, lint, oakum or absorbent cotton will remove or absorb secretions, but *never cleanse.*

The ear is especially the favorite seat of micro-organisms. Loewenberg and Pasteur, have found an excessive quantity of micrococci in aural furuncle, (*Progrès Médical*) even *prior to their opening*, i. e. before the pus had come in contact with the atmosphere. Experiments have demonstrated, that in all the cases, they had to deal with the ordinary *organisms of decomposition.* In all cases of otorrhœa, in which the cleaning of the ear is not done with the utmost care, and by the aid of a suitable apparatus, the pus contains more or less great numbers of micrococci. If in consequence of persistent neglect, insufficient cleaning, the secretion is allowed to become offensive, the micro-organisms swarm in incredible quantities. Fetor points to stagnation, and a slight degree of decomposition dependant thereon, the existence of which is proved by the presence of micrococci. These are especially cultivated, by a prolonged treatment with emollients, particularly cataplasms; the ear becomes then an actual hothouse for the culture of bacteria, which are microscopical objects of the minutest form, and simplicity of structure. They are protoplasmic, automobile, capable of arranging themselves into varied forms and shapes, and reproducing themselves by division into countless hosts. They are considered by some the ultimate form of life, others regard them as embryonal forms of algæ or fungi, capable of developing into mature and perfect form, when the proper conditions are given.

The spherical bacteria, which are observed in the stagnant pus of otorrhœa are absolutely the same, as those occuring in putrefactive decomposition. The bacilli bacterides are usually found in periauricular abscesses, which under favorable conditions are susceptible of rapid and enormous developement. They often effect an entrance into the drum cavity and meatus.

The external auditory meatus is among the cavities of the human body, the most suitable camping ground of those micro-organisms, which are incessantly blown to and fro, by the constant current of air about us. When they touch the walls of the meatus, they cling firmly to it, where they collect and remain for a long time undisturbed.

If now, a fluid secreted in the tympanic cavity, during an attack of *acute otitis* media is effused into the meatus through a rupture in the membrana tympani, it becomes at once exposed, to all those influences, which favor putrid decomposition. The organisms are not confined to the meatus, but are pushed onward

into the tympanum by syringing, by instillation of lotions, or by simple gravitation, whenever the patient lies on the healthy side. The structure of the petrous bone with its numerous fissures, cavities offers a superabundance of recesses, in which secretions protected from any thing but the most careful cleansing can stagnate undisturbed and degenerate into a perfect condition of putrifactive decomposition.

The pathological importance of these microparasites is not exhausted on account of the influences in disturbing the normal process of repair; they may induce a more critical state of affairs. By their simple propagation, they may cause inflammation with collection into the contiguous mastoid process. A proliferated mucous membrane, polypi, caries or necrosed bones, may prevent the escape of pus, and thus cause a condition of stagnation and putrefaction. The inflammation and suppuration may advance, and finally occasion disturbance of the most serious nature in those organs which adjoin the petrous bone, as well as those in a distance. Thus we may have meningitis, phlebitis with corrosion, or formation of thrombus in the adjoining sinus, or internal jugular vein, or ulceration of the internal carotid, all of which accidents are simply extensions of the morbid process. For, innumerable and luxuriant cocci, are all seen in *all* cases of otitis media purulenta, and it is even more than probable, that the morbid process is spread to a distance by the migration of these micro-organisms.

It is well known that death occurs during many cases of otorrhœa, under pyæmic or septicæmic symptoms, without *visible* caries of the petrous bone, or palpable alteration in the adjoining organs. It has been proven that schizophytes penetrate the walls of the lymphatics and of the blood-vessels in company with migratory cells and cocci are swept into the circulation alone, or in company with thrombi, and thus cause metastasis in the lungs.

With the abundant proofs that schizomicetes colonize in the meatus in purulent perforative otorrhœa, the rational plan of treatment must necessarily be *antiseptic*, the aim of which is to destroy the putrefactive condition already present.

Only in *acute* cases the *aseptic* treatment, i. e. to *prevent* the immigration of the schizophytes, to stop the putrid decomposition of the secretions, as well as the suppuration is indicated. Unfortunrtely the opportunities are rare.

In *acute disease of the middle ear*, i. e. of the tympanic cavity, Eustachian tube and mastoid antrum and cells, we use the warm douche by syphon or fountain, or even the instilling of *hot* water with a spoon, every few minutes; the application of two or three leeches; inflation of the tube with either the Politzer air bag, or by the Valsalva method. Inflation is practiced in order to bring the yet movable membrana tympani into a proper position and thus restore the equilibrium of the atmosphere between the drum cavity and the external auditory canal.

The effect of inflation with the Politzer bag on hearing is often magical, although not durable. It is a harmless and a painless remedy, it rights the faulty position of the ossicles, prevents retraction and consequent adhesion of the membrana tympani to the promontory, one of the chief causes of deafness. Paracentesis of the membrana tympani, not only to allay tension and pain, and evacuate the accumulated fluids, but for the purpose of disinfecting the tympanum. *Paracentesis* must not be a mere perforation but a liberal incision with a broad needle, usually in the posterior and lower quadrant, or in the most ectasic part of the drum head, so as to allow a free exit of the often inspissated mucus or muco-pus of the cavity, and which can be much aided by Politzerising. Directly after the meatus is filled with finely pulverized *boracic acid*, which is well borne and fulfills the purpose of warding off the immigration of schizomicetes, and causing rapid recovery, especially if confined in a warm room with perfect tranquility of body. Opiates are not required but may be given, though, a solution of atropia $\frac{1}{100}$ gr. or a few drops laudanum instilled, has often given prompt relief.

In *chronic otorrhœa*, *antiseptics* are in order. The schizomicetes must be killed or at least rendered innocuous, their immigration prevented and the process of decomposition terminated.

According to Professor Friedrich Bezold, of Munich, this is effected by the *insufflation* and gradual absorbtion of *boracic acid* in the constantly secreted fluid. He *insufflates* the finely pulverized *boracic acid*, so that every part of the tympanum is well covered with it. Gratitude and honor are due to Professor Bezold for the introduction in 1879 of this very simple and very satisfactory treatment of this most obstinate disease. But it is due to our townsman Dr. C. A. Todd, that even better results

are attained by the substitution of the *borate of sodium* for the boracic acid, as published by him in the Transactions of the State Medical Society of Missouri in 1880. He says "Borate of sodium is equally antiseptic, is more readily triturated into an impalpable powder, is very soluble, it penetrates into every recess and fissure; its alkaline base probably neutralizes irritating acid, that may arise in the decomposing secretion, and thus bring about disinfection."

But *antiseptic cleansing must be performed before any application can be made to the diseased surface.*

The mere mechanical swabbing out of the meatus, the tympanum and adjoining cavities with tampon of absorbent cotton, *cannot* and *does not* cleanse. This can only be effected by frequent *syringing with a large amount of fluid and a forcible stream*, which will wash out the microbies and enfeeble the vitality of the micrococci which remain. *Superabundance* of moisture excites a noxious influence upon the growth of schizophytes, but a *slight* amount increases their growth.

It is averred, that by a great amount of fluid, we run the risk of making the tissues swell too much, by *excessive osmotic saturation*, which is a very serious objection, but which may be obviated by using *antiosmotic fluids*, such as a concentrated solution of *chloride of sodium* in *boiled* water. Common water alway contains numerous organism, but boiling a certain length of time destroys the propagative capacity of these structures.

In order to avoid all possible danger of leaving decomposing material in the cavity it is best to syringe abundantly and repeatedly with water which has been rendered antiseptic by *boracic acid* and *alcohol* which increases the antiseptic effect of boracic acid and exerts a beneficial and astringent action upon the diseased surface. At the same time, air should be freely forced through the Eustachian tube by the Politzer air bag, or the Vasalva method of inflation; for air like stagnant water leads to putrid decomposition. Chloroform vapors may also be insufflated with advantage.

The excellent effect of alcohol in suppurative otitis media by dessication and molecular coagulation of albuminous fluids, has long been known; its energetic action upon a diseased mucous membrane has always been recognized.

We cannot lay too much stress upon the beneficial antiseptic action of alcohol. Its antiseptic effect is considerably increased

by a combination with broracic acid. A liquid remedy can penetrate into all cavities and fissures, but it cannot *remain* in permanent contact with the diseased surface. This condition can be fulfilled by keeping a reserve of active material in the shape of a pulverized remedy, whose gradual solution produces a continued action. A supersaturated alcoholic solution of boracic acid and 10–20 per cent. more than the alcohol can dissolve, will meet this indication.

This solution slightly warmed and well agitated is poured into the ear, and the boracic acid is carried along with the fluid, reaches the entire surface. Let the solution remain in the ear as long as possible. Even granulations and polypi disappear under this treatment without direct surgically operative interference.

Insufflation of *dry* boracic acid as advocated by Bezold, does not meet the requirement. It is in the first place coarsely triturated and causes traumatic irritation, and secondly it is not easily soluble in water and it is apt to concrete in the cavity and occlude it entirely. I remember having had under treatment a lad, aged eight years, a victim to perforating suppuration of the middle ear; the discharge was very abundant and fetid, so that he had to leave school. I determined to try the dry antiseptic treatment, without *previous* syringing. I dipped the absorbent cotton probe in again and again, without being able to remove the entire fluid contents of the cavity and still less to correct the fetor. I had to resort to the syringe at last. The cavity was promptly cleansed, deodorized and dried. I insufflated finely pulverized boracic acid so that the entire mucous surface of the cavity was covered with it and I filled the whole meatus with it besides. In three days the boy returned feeling very uncomfortable, complaining of pain and vertigo.

The meatus was hermetically closed as if filled with cement. The probe made no impression upon the concretion. Water would not soften it, but alcohol gradually did, so that, I could drill and scrape it out and give exit to a large accumulation of fluid. The relief was instantaneous. I cleansed the ear again with the syringe and substituted the borate of sodium, for the boracic acid filling the meatus with it to the brim. Next morning not a trace of it was left, it had entirely absorbed. I suggested to the parents, to syringe the ear with boiled water and a little common salt, and fill the ear with the borate of sodium whenever a discharge was visible. The result was satisfactory.

Fetor disappeared entirely, the discharge lessened and gradually ceased, but the perforation in the membrana tympabi is as large as ever. H. D. 24 inches.

Politzer uses sulphate of alum for insufflation but parasites have been found (aspergillus penicilium) in a solution of alum, it is they that cause otomycosis. The burned alum may do better.

The *absolutely dry method of treatment of otiiis media purulenta* has come in vogue only of late—it is now in the height of fashion—and has found able advocatesin this city, whose opinions are entitled to the highest respect. I cannot learn that this plan has found favor elsewhere.

With all due deference to the *home* aurists, I am constrained to dissent from their views. They cannot stand the light of investigation, are impractical in their application and unsupported by authority and experience.

Although *insufflation* of dry remedies is as often practiced as instillation of lotions, it should only be done *after* cleansing the ear with water and syringe. My reasons for not favoring the exclusive dry treatment, for not preferring the cotton probe over the syringe are:

None but aurists are likely to be provided with the appliances of aural surgery. The use of the mirror speculum and probe requires good light, good sight, great manual dexterity and docile, reasonable and obedient patients. Children and nervous people are timid, restive and resisting. Of course, all proceedings are then ended. But a mere tyro can use the syringe. Parents and nurses can be easily instructed, how and when to use the syringe, or they can be limited to the mere pouring in of boiled water with salt, and let it run out again. They can be taught insufflation as easily as instillation, which cannot be done too often. For, when there is fœtor there is decomposition, there is sepsis and there are micro-organisms, which must be at once and very energetically treated, by cleansing and antiseptics, whether with dry borax by insufflation or a supersaturated alcoholic solution of boracic acid. It is not probable that patients will visit aurists whenever they perceive a little fetid discharge, and yet it must be promptly and vigorously met. We are bound to rely on nurses in most cases of sickness, but in none more so than in this. The aurist can hardly do much more or better, except when the absolute dry treatment without proper cleans-

ing is determined upon. The probing can only be done by the well trained aurist. But the most skillful manipulation of the cotton probe is more irritating than the syringe, and at no time as efficient, for no amount of wiping, even to dryness can remove fœtor. By aspirating, Politzerising or Valsalving, ventilation of the drum cavity may be effected, stagnant air and excess of fluid may be expelled, but the surface remains moist and continues to be the breeding place of parasites. But even ventilation may not always be feasible. The tube may not be pervious, and with children it is only accidentally effective. The syringe and antiseptic treatment, with either lotions or powders, finds application in all cases.

Iodoform has been much recommended in suppurative inflammation of the middle ear, but it was abandoned after a fair trial. The pungent odor was unbearable both to patients and their surroundings, and which can not be disguised. It was also tasted for hours after insufflation.

Prof. Gruber, of Vienna, discusses the three methods now in vogue, in the treatment of otorrhœa:

1. Schwartze's treatment with strong solution of nitrate of silver—15–20grs. to an ounce. He finds it best in cases of extensive perforation, in which the tympanic mucous membrane is largely exposed. To avoid cauterising the Eustachian tube and throat unnecessarily, he introduces the caustic solution by means of a syringe, whilst the patient's head is resting on the opposite side of the occiput. The nitrate of silver is then neutralized by the injection of a warm solution of common salt.

2. He compares Bezold's boracic acid and borax treatment. He find the latter in a concentrated solution, more effectual in otorrhœa as a symptom of chronic middle ear catarrh, accompanied by destruction of the drumhead; but in chronic supporative inflammation of the middle ear, with destruction of the membrane, boracic acid renders good service, but it must be continued several the weeks after the discharge has ceased.

3. The treatment with spiritus vini rectificatus is, chiefly adopted where there are polypoid growths This can be combined with boracic acid, but it is also effectual without it. (*Wiener Med.*) *Wochenschrift.*

Ménière recommends a solution of carbolic acid in Price's

glycerine (1 to 10) of which 3 to 4 drops are to be instilled into the ear (after thorough cleansing) twice daily, or preferably to be applied on absorbent cotton by means of a pair of forceps. It must be kept up two or three months after subsidence of the flow. (*London Med. Reord.*

A judicious use of constitutional remedies should not be neglected in otological practice, considering that purulent otorrhœa is occasionally a sequel of syphilis, of rheumatism of struma, it is evident that a diathesis of these diseases must be met with a treatment indicated in these cases.

As in ophthalmic practice, so in otological, internal treatment has proven of inestimable value.

Mercury occupies the front rank. Sir Wm. Wilde says: "it is the remedy, which of all others acts most beneficially and with specific efficacy in diseases of the ear." This strong and unqualified praise, though not shared by most modern authorities, is yet endorsed by a good many. I have attained most gratifying results from a persistent use of the bichloride or biniodide of mercury in doses from $\frac{1}{48}$ to $\frac{1}{8}$ of a grain three times a day, and even then, when there was not the least taint of syphilis discernible or suspected. In my clininal record a stereotyped formula of the biniodide is very often found, in both eye and ear cases. Especially was it found of great advantage, when the tympanic inflammation was threatened with, or gave rise to intra-cranial complication. Periostitis of the tympanum will soon be followed by periostitis of the antrum and mastoid cells, and of the dura mater.

Muriate of ammonia, pyrophosphate of soda, sulphide of calcium, pulsatilla, calendula have been recently spoken of, but not having tried them sufficiently, I am unable to express an opinion about them. I am however convinced of the great value of tonics in chronic aural diseases with discharges, especially the quinine, iron and strychnia.

Most of the distressing symptoms of aural diseasss are more or less amenable to local and constitutional treatment with the exception perhaps of tinnitus aurium as an objective symptom. I have yet to learn the remedy which in some cases has given the least relief though I went through the whole list. I know of cases who went from aurist to aurist in this country and in Europe,

who were brought to the verge of insanity, without obtaining the least amelioration.

The allusion to constitutional treatment will get no response from specialists, i. e. who are specialists only but will be readily concurred in by the profession at large. The eminent ophthalmic and aural surgeon Dr. Theobald, of Baltimore,in one of his lectures on the use of constitutional remedies in the treatment of ear diseases, very aptly said: "The mere specialists in otology overestimes the value of purely local measures, and underestimates the value of constitutional remedies."

Only by a judicious and intelligent combination of both great result may be achieved. In this paper I had to draw upon standard authorities especially on the essay, read by Dr. Loewenberg of Paris, in the International Congress of Otology in Milan in 1880.

DISCUSSION.

DR. WILLIAMS.—It appears to me that the doctor has laid too much stress upon the parasitic nature of otorrhœa. It is well-known that otorrhœa is an inflammation of the drum cavity. It begins as a rule in the form of an acute inflammation in connection with the exanthematous diseases or bad colds. This soon leads to suppuration and consequent collection of pus in the drum cavity which distends the cavity and soon breaks through the membrana tympani. Then the discharge appears externally. As soon as the discharge makes its appearance and flows freely, the patients are relieved of their intense suffering. The acute inflammation gradually subsiding, passes into chronic inflammation of the drum cavity. The otorrhœa comes from the inflammation, and in turn the pus, constantly bathing the mucous membrane keeps up the chronic inflammation. So we see that otorrhœa is self-perpetuating; the inflammation starts the suppuration, and in turn the pus keeps up the inflammation. This is the reason why otorrhœa so rarely gets well without treatment. Now, if the chronic inflammation is produced by these parasites, the doctor mentioned, then he is correct; if the inflammation is not produced from that cause, he is not correct. We do have affections of the ear where we have parasites, there is no question about that; but that otorrhœa, as

a rule, is the result of parasitical irritation is, in my judgment, not correct. These micro-organisms are the *result* of and *not* the cause of otorrhœa. So far as the treatment is concerned, the best remedy is boracic acid. This is used, as a rule, in a dry form. I prefer to use it in that way. And the doctor is certainly correct in what he says in regard to syringing the ear. The so called dry treatment of otorrhœa is certainly an imaginary benefit. There is nothing so cleansing as warm water injected with the syringe. I always clean the ear in this way, and then, by preference, I use the remedies in a dry form, putting the boracic acid into the ear in dry powder. I have used this powder continuously and never had any trouble from these concretions, such as the doctor speaks of. I simply use enough of the powder to cover the surface of the membrana tympani. I never pack the cavity full nor half full. I simply cover the membrane. That is sufficient. These antiseptic remedies, so-called, are very nice theoretically; but I must say, with all deference to the doctor's opinions, that I think he overestimates the effect of micro-organisms as the producing cause of otorrhœa. I have had no experience in the use of alcohol, but, theoretically at least, I should object to it, because it would most probably irritate the inflamed mucous membrane. It is certainly antiseptic; but whether it would irritate or not would be the question that would arise in my mind. I always wash the ear once a day in the beginning, and then use the powder. After the supuration ceases, which will be in two or three days in favorable cases, I make the application once in two or three days, and as the improvement goes on, I gradually discontinue the treatment. After the ear dries up entirely the treatment should be continued for three, four, five or six weeks. Then I count less on a relapse than if I stop the treatment soon after the discharge stops. While the abscess is forming the doctor objects to the use of opiates. I have had a good deal of experience with the use of opium in this stage of the disease. The membrane should be punctured early and let the matter out. But in some cases you can not get the parent's consent to do that, and in other cases the narrow condition of meatus may prevent that kind of an operation, and in such cases, the pain always being severe I am in the habit of giving opium internally while I am waiting for the abscess to break spontaneously. There is no reason why it should not be given. So far as the

constitutional treatment is concerned, I am firmly of the opinion that otorrhœa is purely a local disease and needs only local treatment. Ordinarily it is a complication of an exanthematous disease, and rarely ever needs constitutional treatment. I never give medicine internally unless there is some evidence of constitutional disease, such as syphilis and kindred affections. In all such cases the internal treatment is most important and must be pushed rapidly, because that is the chief thing. But in common cases of otorrhœa, where there is no evidence of syphilitic trouble, I use no internal remedies at all, but treat it simply as a local disease.

DR. BERNAYS.—How do you account for the effects of boracic acid?

DR. WILLIAMS.—I can't explain tnat satisfactrily. Boracic acid checks suppuration and the theory is that it does it by its antiseptic power.

We use many things in inflammation that have no antiseptic power whatever, and yet they cure the inflammation. For instance we use calomel in certain kinds of conjunctivitis. Calomel is not antiseptic and yet calomel will cure local inflammations. I have never heard calomel called an antiseptic. The theory is that boracic acid acts as an antiseptic, but at the same time all antiseptics will not cure an inflammation of the mucous membrane. That is a well established fact, and we can not ascribe the effect of this remedy to that property exclusively. I believe rather that it acts as an *anti-suppurative*. I would like to know in what way calomel is antiseptic.

DR. BERNAYS.—Calomel is one of the strongest antiseptics we know of. If you pour some calomel into a stinking septic stool you will remove the smell quicker than by any other means almost. We give it in the initial stages of typhoid fever because of its antiseptic properties. That is the reason that it has been retained by the modern prretitioner. The old practitioners gave it to drive off the bile; we give it because we know it to be the most powerful antiseptic that we can give. Now I think that Dr. Williams and Dr. Pollak agree, with the exceptions that Dr. Williams refuses to accept the proposition that inflammation of the middle ear is dependent upon sepsis. The only reason that we can adduce for the beneficial effect of boracic acid is its

antiseptic properties. And another thing, all bad cases of otorrhœa are accompanied with a smell, which is impossible unless there is sepsis. We know that pus can not become fetid unless it depend upon septic organisms, upon bacteria and micrococci. I think that that will suffice to make the doctors agree perfectly.

DR. WILLIAMS.—Why will not boracic acid cure all cases of otorrhœa?

DR. BERNAYS.—Because many cases are dependent upon constitutional disease.

DR. WILLIAMS.—Why will not both kinds of treatment jointly cure all cases?

DR. BERNAYS.—Because we can not cure every case of syphilis; there is a peculiar deposit left behind. This occurs after typhoid fever, scarlet fever or the measles; in these cases there is a peculiar deposit in the tissue that resembles very much the syphiloma. After the case of scarlet fever has been cured we have what is called gumma after syphilis. It has no name as regard to scarlet fever. Pathologists are just beginning to recognize it. It is a peculiar cell deposit that bears the same relation to scarlet fever that gumma does to syphilis.

DR. RUMBOLD.—Whenever mucous secretion accumulates in the drum cavity, after remaining there a short time, it will become acrid and decompose, as was well stated by Dr. Pollack. This not only helps to maintain inflammation but will aggravate it. I think that to the use of the common syringe, which is usually given to patients, may be attributed the failures in cleansing the ear. The auditory canal is curved, and if not straightened to some extent, we can not reach the whole cavity with the ordinary ear syringe.

I think that Lucæ's ear injector is the only ear syringe that ought to be used.

DR. WILLIAMS.—I do not like this idea of using hydraulic pressure for washing out the ear. It is too severe. Nothing is better than the hard rubber syringe, and two or three injections are sufficient to cleanse the ear. This hydraulic pressure is liable to force the water into passages where it should not go, as, for instance, into the mastoid cells. I do not like the syphon syringe by any means, as the stream is continuous so that substances in

the external meatus would not get out as easily as if the stream were interrupted. In syringing the ear, wax and other materials often come out just at the close of the injection. In the use of the hydraulic pressure syringe the benefit of that intermittent current is not obtainable. Now in regard to the drum cavity which the doctor has represented. I see no object at all in trying to get water into the upper part of this cavity, because the fluids all gravitate downwards, and everything that is loose would be on the bottom. Then again, this is not a large cavity; it will contain, perhaps, some two or three drops of water, and if you inject water through this opening into the lower portion of the drum cavity, the capillary attraction will carry the water clear to the top of the cavity. So capillary attraction will enable a person to wash the whole internal surface sufficiently. Now so far as the sepsis is concerned, I will say that, of course, where we have this pus we have decomposition going on. That we cannot avoid. We have it in the nose frequently. We have it in any cavity where the pus is confined. Now, while Dr. Bernays claims that this is the cause of the trouble, I claim that it is only the result of the suppuration, which is a product of inflammation. So that he takes as the cause of the trouble what I consider to be the result. I do not deny that decomposition is going on there, but it is simply because the matter is confined and can not get away; but this is not the *cause* of the trouble, it is simply the result of confinement of the matter. Otorrhœa results from an acute inflammation of the mucous membrane of the ear which leads to an abscess, the acute inflammation subsides into a chronic form, and that condition is self-perpetuating, as I mentioned a while ago. That is my text and I stick to it. I undertake to say that the remedies that we use in this affection do not act by their antiseptic power alone. They have other effects which I can not explain. We say they are anti-suppurative. We can not tell how opium acts to relieve pain, still it is a fact that it does so. We can not explain the modus operandi of any remedy except in theory.

DR. RUMBOLD.—It is impossible for any one to fill the middle ear above the perforation in the membrana tympani by capillary attraction. The air is not easily removed, it has no opportunity of getting away, unless it is forced away by the water. The whole of the mucous membrane of the tympanic cavity is

inflamed, therefore secretes muco-pus which must be washed away. This is the pleasantest method of washing the ear. It is the only method that patients can successfully use themselves. Girls five or six years old will use it successfully. Lucæ's injector is not a "hydraulic pressure syringe," it is an instrument that removes muco-purulent secretion in a milder manner than can be done by any known means. This is *the* reason that I so strongly recommend it. Again, there is no hardened ear wax or "other material" to be removed from an ear that is affected with otorrhœa, nor is an intermittent stream desirable, as all of the offending secretions are fluid, and, are much easier removed by a constantly running stream, much less cleansing fluid being required, it being important to use as small a quantity of fluid as possible.

DR. BERNAYS.—I stated distinctly that it was my opinion that otorrhœa or inflammation of the middle ear followed typhoid fever, scarlet fever, syphilis, or any other chronic or acute fever, also that it may be caused by traumatism. Now simple cases of otorrhœa media do not become septic at all. They heal up like any other abscess. But we do not have much to do with the treatment of those cases. They will get well by themselves unless there is a development of bacteria, and then we are called upon to treat them. Therefore sepsis is the cause of continuous and chronic catarrh of the middle ear. It is not the cause of acute catarrh. No one supposes such a thing.

DR. RUMBOLD.—I wish to say that Lucæ's syringe is the child's syringe. That is the reason that I advocate its use. Physicians may use the hard rubber syringe; but I would not give a hard rubber or glass syringe to a child or the child's mother, who knows nothing of the anatomy of the parts, and must use it too long before she can cleanse the ear.

DR. POLLAK.—In closing this discussion I beg leave to state that I have never troubled the society with a paper before and wouldn't have done so now had I not been compelled to do so. At the Medico-Chirurginal Society a few weeks ago a paper was read by Dr. Todd in reference to the treatment of otitis media chronica with discharge, and as I have stated, in 1880 he published a paper in which he advocated the dry treatment—the antiseptic treatment; and that no water ought to be used. I tried the dry treatment for some time simply out of respect to

Dr. Todd, but I found it impracticable. For six months I tried it honestly and fairly both in hospital and private practice and I couldn't get along without the use of the syringe. I never have read anything about the *exclusively* dry treatment, except by a few physicians in this city; although I take a good many journals, I never find any reference to it in them. In the paper which was read a few weeks ago Dr. Todd reiterates what he said before, and insists that the use of the syringe is absolutely dangerous. Dr. Spencer stated that he had not used a syringe in any shape or form for several years. I don't see how it is possible for a physician with a large otological practice to get along without a syringe. In preparing my paper I have drawn very largely on such authorities as Pasteur and Loewenberg, the highest authorities that we have, and they give as the cause of chronic otorrhœa, the presence of micro-organisms. Wherever there is fœtor, there must be putrid decomposition, sepsis and micro-organisms, and for this we must use an antiseptic treatment. In using boracic acid it is necessary to dissolve it in alcohol. It is not easily soluble in water. I have been in the habit of adopting Dr. Todd's idea, and using the borate of soda which is quite as much antiseptic as boracic acid. If the ear is filled with borate of soda, in a few hours there is none of it to be seen. As regards the constitutional treatment, I usually combine it with the local treatment and always get good results. In the case of the boy which I spoke of, the boracic acid had concreted until it was as solid as cement, although it was finely pulverized. It will concreted and set up an irritation. Borate of soda does not do this. I use an ordinary syringe, and I don't care what position is assumed by the patient. I take boiled water with a little salt and clean the ear out first and then put in the powdered borate of soda.

A CALLED MEETING OF PHYSICIANS AT THE POLYTECHNIC HALL, TO TAKE ACTION ON THE DEATH OF DR. JOHN T. HODGEN.

SATURDAY, April 29, 1882.

At eight o'clock the meeting was called to order by the election of Dr. John S. Moore, as chairman. Dr. A. H. Ohmann-Dumesnil was chosen secretary.

DR. MOORE on taking the chair, addressed the meeting in the following words:

Some years ago, I think probably at the conclusion of a meeting of this kind, I was walking with Dr. Hodgen on Sixth Street, and I said to him: "Doctor, if I die before you do, I want you to say something for me, and if you die before I do, I shall perform that office for you." And this, it seems to me, is a good time for me to fulfil my promise. Yesterday I picked up a paper and the first thing I saw was a notice of the death of Dr. Hodgen. I was terribly surprised. Surprised just as I was when I picked up a paper years ago and learned that President Lincoln was shot, and surprised as when I learned that President Garfield was shot, but I was not greatly surprised after all, for I remembered that some years ago he told me there was something the matter with him. I knew Dr. Hodgen for many years; I was his friend always. As a medical student I lectured to Dr. Hodgen. He was then a mere stripling—a bright-eyed boy. He listened to and understood everything. He always understood what I told him. He was a man of extraordinary memory. I say, gentlemen, we were always friends. No feeling of unkindness ever rippled the surface of our friendship. He visited me last winter, after a certain lady who was formerly his patient had placed herself under my charge, and he had reason to believe that she endeavored to prejudice me against him, to alter my opinion of him, and he said he had called on me because he wanted to see that no one would shake my opinion in him. I assured him that the feeling I possessed for him was too strong to be broken by any one. In walking up Fifth Street one morning, the last time I saw him, he was riding in his buggy, and seeing me, drove over to where I was. I looked up to him inquiringly. He said: "I have no business with you. I just wanted to come up and shake hands for old friendship sake." I always admired Dr. Hodgen. The character of Dr. Hodgen, intellectually and morally, was superior to that of any man I ever met. He had few equals and no superiors. He was the best example of success in this city or in this age. No man ever achieved the success that he has. He had the ambition of a Cæsar, and there was a striking resemblance to the pictures which are given to us as likenesses of Cæsar. I know not whether these pictures are mere ideal or real copies of the man's features, but at any rate the

head of Cæsar is strongly suggestive of a great, an ambitious man, and Dr. Hodgen bore a striking resemblance to the accepted portraits and busts of Cæsar. In the second place, he was a man of remarkable talent. He was remarkable for his erudition and for his knowledge of medicine and surgery. He was an unusual, a wonderful man. But notwithstanding all this, he is dead. His death impresses upon us the words of the poet:

"What shadows we are, and what shadows we pursue."

Peace to his ashes!

Dr. Borck here moved that a committee of five be appointed to draft resolutions to the memory of Dr. John T. Hodgen. The motion was carried, and the president appointed as such committee, Drs. LeGrand Atwood, G. Baumgarten, Wm. Dickinson, C. W. Stevens and E. F. Smith.

DR. S. H. FRAZIER.—I cannot allow this opportunity to pass without saying something. I have been engaged in the practice of medicine in St. Louis with him some twelve or thirteen years, and during the whole of that time I have never heard anything unfavorable of him. If there ever was an honest upright man, that man was Dr. Hodgen. I regret that I cannot express myself as I would like to. This should certainly admonish us as to the uncertainty of life. I did not expect to outlive this man. I expected to lean on him in my old age. I hope I may be able to meet with you on the morrow. I do not know whether I will or not, I trust I may.

DR. S. T. NEWMAN.—A great and good man has gone. We have listened so often to his words of instruction; but we shall hear his voice no more. It is silent in death. It has been my fortune to know Dr. Hodgen for many years. I came to this city thirty years ago, and Dr. Hodgen was among my first acquaintances, and I learned to love him as a man and as a physician. Dr. Hodgen was not a selfish man, he was a man of large heart, but he has taken his place among the dead. We shall see him no more, we shall hear his pleasant voice no more. Dr. Hodgen was the practical man of the profession. He was a man who desired to elevate the profession. He was among the first in this city and perhaps the first elsewhere to insist upon the three years' course, and his constant aim was to elevate the profession; but he has gone and we shall see his face no more nor again come under his influence.

DR. W. M. MCPHEETERS.—I am aware that there are many others present who wish to express their views, and give utterance to their pent up feelings; for this is a sorrow that reaches us all, I shall be brief in what I have to say. It is to express no ordinary sorrow that we meet here no-night. The deep solemnity that pervades this assembly and the feeling that is expressed upon every countenance shows that we all realize that we have sustained a personal loss, every heart is touched and every one

is alive to the fact that we have sustained a loss that is hard to replace. Dr. Hodgen was the one man that the profession could not afford to lose, that we all felt that we couldn't afford to lose, and, it is no exageration to say, that there is not another man in this community whose loss will be more deeply felt than that of Dr. Hodgen. I shall indulge in no eulogy. It is not necessary. The simple statement of facts is enough. Dr. Hodgen was not a perfect man, but he possessed some rare good qualities of head and heart, in a rare degree. He had a mind that was as clear as a sunbeam. He had clear ideas himself and a faculty of making them clear to others. He spoke as with demonstration, and when any new difficulty arose, he arose with the occasion. His moral qualities were of the highest order. He was a man of sterling integrity, a man of truth, a man of honor. I will close by saying another thing, and in my estimation it is the crowning viutue of all, he was a Christian. He made no boast of his religion, but in this as in everything else he was firm and decided.

DR. HEACOCK.—This is an unusual meeting—a meeting that I didn't expect to attend. John T. Hodgen is dead, and we are assembled here to-night, the aged, the middle aged and the young to express our deep sorrow at the loss and bear testimony to the great worth of this great man. Our departed medical brother was born in the mountainous region of Kentucky, on the 17th, day of January, 1826, and died in this city at thirty minutes past seven o'clock last evening. In the ordinary course of nature, I should have passed away before him, but it has been ordered otherwise; I shall remain a little while longer, but I too shall soonfollow. He was what is usually termed a self-made man. He had never taken a college degree. He used to obtain books whenever he could, which he read with great care and industry. He came to Missouri and entered the medical department of the University of Missouri, from which in the spring of 1848 he graduated mith more than ordinary distinction. After his graduation he lived for a short while in Pittsfield, Ill., but at the instance of Prof. J. N. McDowell, he came to St. Louis and has resided here ever since.

DR. ATWOOD.—The committee after mature deliberation have reached the conclusion that they would request of this meeting of the physicians of St. Louis, further time to make a report commensurate with the life, character and unfortumate death of our deceased brother. We can not do justice to such a subject within the scope of a few moments. We would therefore request additional time in which to report.

THE PRESIDENT.—I think it very proper that further time be granted.

DR. A. C. BERNAYS.—If I undertake in a few words to draw a picture of this great man, and so place it uponhis coffin as a

necrologue I am well aware of the difficulty of my undertaking. But I cannot deny myself the opportunity of paying this last, by no means the first tribute to the deceased, as a man of science. The name of John T. Hodgen was well known and as highly honored in many places in Europe as among ourselves. Science knows no bounds. It is cosmopolitan and its votaries all over the world are linked together in a common brotherhood. The success of one is the glory of all. The loss of one is the loss of all. With John T. Hodgen, American surgery lost a man who served our science by working up new questions, and who was always progressive. Free from the prejudices of a school; always depending upon himself he preserved a certain originality for himself which alone can lead to true progress. He was an autodidact in the fullest sense of the word. For many years he has been prominently before the profession, and always as the standard-bearer of an onward movement. His name is the synonym of progress, and his fame will endure for ages. Honor to his memory.

DR. WM. PORTER.—I think it is eminently fitting that the young men of the society to which Dr. Hodgen belonged, and the young men of the profession which he so greatly honored, should bear tribute to his great worth as well as those who are his compeers in years. I could envy those who knew Dr. Hodgen a lifetime. I was not so fortunate, yet for a few years I knew him well. Living near him and seeing him daily, his life was to me a revelation of earnestness and devotion to duty. His mental form was of giant mold and his heart was warm and true. The lines of beauty of his life are deeply woven in the warp and woof of our great city. The threads are golden and the chain enduring. A few years have gone and Kennard, the elder Pallen, Gebser, Thomas Scott, Edgar, Youngblood, Frank G. Porter, John McDowell, Spinzig and Hodgen have fallen. These were men, and men do them honor. McDowell is dead and they call a worthy association by his name. Hodgen dies, and here is a worthy association to his honor, and our city and country mourn him. To-night in a hundred homes touching stories of the great surgeon will be told, and to-morrow tears will flow from many eyes that for his skill would have been closed forever. Rest to which he was a stranger here has at last come to him. To us who fully realized his untiring energy how strange it is to say, "Hodgen rests."

DR. CRONIN.—As one of the young men of the society and as one young in the profession I certainly feel as Dr. Porter suggested that it is our duty and the duty of myself as a representative of the young element of the St. Louis Medical Society to pay a tribute of respect to this giant intellect which towers like a beautiful column fixed upon firm principles of manly integrity, firm purpose, unswerving faith in his profession, rising be-

fore us young men as a character that we may admire and copy; in every feature there is something for our emulation. I had the honor of being personally acquainted with Dr. Hodgen long before I adopted the practice of medicine, and I may say that it was probably the character of such men as Dr. Hodgen, that led me to adopt the medical profession as my life's vocation. Since adopting the profession I have always felt that I had a friend in Dr. Hodgen, because he has always been the friend of the young men in the profession; and the younger members of the profession will miss his guidance. The character of Dr. Hodgen was a beautiful one and needs no eulogy, no epitaph to do justice to his memory, he has made a name that will be remembered long after his mouldering remains have passed away; his face will long be remembered after those who had the pleasure of knowing him as a friend have passed from life. He was a self-made man, he was above the little things of life and his loss will be much felt by the young men of the profession.

DR. BARRETT.—I was going to suggest that we would like to know something of the last illness of Dr. Hodgen, and the nature of the trouble that carried him off; and I would suggest that Dr. Baumgarten, who was his chief physician, would give the profession the benefit of the history of his last illness.

DR. BAUMGARTEN.—I recognize the right of the profession to hear the story of the illness that carried off our greatest and most honored member, and I recognize my painful duty, such as it is, to relate it. It is not proper that we should enter into the minor points, and professional views of the case and therefore I will state as plain a tale of the case as will be practicable. I arrived at the house on Thursday noon about an hour after Dr. Hodgen had returned home and found him attended by several physicians and his family, in indescribable agony. The attack was similar to such as he had had many times in his life, attacks which he called bilious colic; I think, colic. The attack began in the same way as it had before, by very severe pain, but it didn't pass off; and there was also a difference between them from the very beginning. There was a tenderness of the abdomen, a tenderness on pressure; a tenderness below the ribs on the right side. The pain moreover was more severe than it had been before; he himself in the moments in which he could express himself for pain, said that there was this difference in his case. He expressed himself so twice to me. When the tenderness in the right side was mentioned he said: "Yes, that is something new"; and again when it was mentioned he said: "Yes, that is different." It was impossible to chloroform him satisfactorily. Chloroform did not relieve him. He breathed, he moved; so that it was impossible to chloroform him satisfactorily, and it was only after the injection of morphine which we found it necessary to give — Dr. Smith

administering it—and repeating it every half hour, that it became possible to assuage the paroxysms of pain with chloroform. After this administration it was possible to put him to rest with a few whiffs of chloroform. Subsequently during the course of the afternoon we repeated the doses of morphine and bismuth by the mouth, but it failed to produce the same relief, that is, it was then more difficult to again, with the help of the chloroform, subdue the pain; until finally a large injection of morphine administered at night, I think at about eight o'clock on Thursday night again, put him to sleep. From that time on he became quiet and he remained quiet until after midnight; he slept peacefully during the night until towards morning he became somewhat more restless and repeated injections of morphine did not entirely succeed in quelling the pain, and the case wore a more serious aspect. At eight o'clock in the morning, a consultation was again held, Drs. Smith, Gregory and Johnson being present. The case wore a more serious look. I should mention that in the afternoon before the last injection, or before the injection of morphine that finally put him to sleep, leeches were applied to the abdomen, and after the consultation in the morning the leeches were repeated; I think they were applied somewhere about ten o'clock. At this time the tenderness was over the whole abdomen and not confined to the right side. There was evidence of a general peritonitis. The pulse had been sinking in volume and increasing in frequency ever since the night; the hands became cold and clammy. The last injection of morphine was administered at nine o'clock in the morning and it was combined with a small dose of atropia. The condition was such at that time that the patient required stimulation. I had to stop the bleeding from the leeches and apply stimulants. In the afternoon at one or two o'clock the pulse went up to between 120 and 140, vacillating a good deal; the skin became very moist and the patient was evidently entering into a collapse. Several doses of atropia, hpodermically administered staved off the result for a short time, but he sank and towards seven or seven and a half o'clock he passed away. During the whole course of the day it was evident that a general peritonitis had taken place, which was obviously, to my mind, the result of a partial peritonitis of the right side of which no other cause could be imagined except a perforation. I would prefer to have Dr. Gregory give the result of the post-mortem. I have heard it said that Dr. Hodgen was always ready to answer a call; he answered his last call but too well and too promptly. He was one man whom the profession couldn't spare.

DR. GREGORY.—Mr. President and gentlemen, it was my sad duty to-day to expose the causes which led to the disaster of yesterday. On opening the abdomen it was apparent that the viscera of the right side, and perhaps the left also, were stained

with bile. It is a very common thing in making post-mortem examinations to find the liver stained with bile; but here it was apparent that it was diffused; that the organs near the liver were actually inundated by bile; so that after examing every part of all the viscera of the abdomen we returned to the liver and upon removing the liver and wiping the gall-bladder with a sponge we found an altered spot, and in this altered spot there was a little pin hole, just such as you would make by sticking a pin in paper and through this little hole by pressing the gall-bladder we could make the bile well up. We proceeded to expose this part of the bladder and on examining this altered spot we found an ulcer, this little pin hole being the centre of the ulcer. I believe, apart from this, we may assume that there was no condition that would possibly account for the symptoms. There was no obstruction of the biliary ducts. The liver seemed to be altered in consistence and didn't seem to be perfectly normal and healthy. The liver was altered but it was not the result of the last sickness. The general peritoneum was not perfectly healthy; it was about three times its normal thickness; so that there was evidence of former troubles of this membrane, evidently of an inflammatory character, and it is not unlikely that much of the trouble that our friend suffered with for many years reaching back thirty or forty years, was connected in some mysterious way with the chronic ulceration observed in this part. I was called to-day to see a patient whom Dr. Hodgen has attended for some months, a chronic case of joint trouble. He is an intelligent man, at St. Luke's Hospital, a great admirer of Dr. Hodgen, and he told me that Dr. Hodgen was in the habit of tarrying some time in his room; he seemed to think it was a quiet retreat and would take his seat and stay some time, and he observed, not only at this last visit, but frequently during the winter that he was not well, and frequently told him that he was not well; and he says that the doctor admitted that he was not well, that he was suffering, and that he would frequently press his hand upon his abdomen and double himself up; and he says he told him from time to to time "Doctor you will certainly kill yourself; go home and rest yourself; you are worn out;" and the doctor would remark: "Oh! how I wish I was made of iron." Certainly he possessed a most extraordinary will. I really believe it was a pleasure for him to work, and he never seemed to be tired. Occasionally he was a little worn; but there was never known a time when he wasn't ready to be up and ready to do anything that his hands found to do; and it has been a marvel to me from time to time how he could resist the stress which he voluntarily took upon himself in a large measure. Doubtless he was imposed on. As a member of the faculty of the St. Louis Medical College I feel that we have imposed upon him. I have felt for some time that he has been the driving wheel of that in-

stitution. For the last fifteen or eighteen years he has been the head of the college. He has been the life of the whole college, the force which has moved the whole institution these many days and I have felt that the faculty have imposed upon him.

On several occasions he has expressed a desire that we should allow him to withdraw from the position of dean of the faculty, and when I looked at him and thought how much he had to do professionally, I could but realize that this additional labor was the last straw, and I regret it now; I regret that we did'nt make some arrangement years ago to relieve him, at least of this responsibility. Now we have lost him and I feel that we have lost all. For the moment I don't see how his place can be supplied. I feel that I have lost a counsellor: I feel that I have lost a precious friend. In all my professional straits, which have occurred from time to time, when I have sought his council I never turned away without feeling that it was satisfactory. Amid this sadness it is somewhat comforting to know, that although it was of no avail, everything was done for him that could have been done under the circumstances.

It has been remarked that Dr. Hodgen was a man of some great and marked characteristics, and one of the greatest features of the man was the immensity of his knowledge, the quickness of his views. He seemed to have a faculty of taking a position relatively to any point which enabled him to see the point. This was one of the great features of his mind; and he could take the young men that were tutored under him to his standpoint and show them what he saw. Some men are eminent for their great learning; Dr. Hodgen was eminent for his great wisdom. I often in passing a large building that is in progress of erection and see the heaps of material which are intended for the building and wonder how it all is to be disposed of; a few weeks or months afterwards I again pass and this material is disposed of and the building has not reached its first story. I often wonder what has become of it. I often draw a parallel between the man of wisdom and the man of learning. From time to time we see a man who has the peculiar faculty of turning learning into wisdom; and it is this faculty which enables him to square and chisel the material to its proper place, and when the material is in its proper place it loses its bulk and that disappears. So it is with learning and wisdom. Men who are eminent for learning are not always eminent for practical capability; and some men who seem to possess relatively little bulk of learning are eminent for wisdom. Dr. Hodgen always seemed to me to be a man who knew exactly how to fit the material of knowledge into their places and thus diminish the bulk whilst they elevate practically the superstructure of life.

I will not say anything as to his honesty, because every man who knew him can certainly endorse that without the

slightest reservation. I will not say anything about the goodness of his heart, this was patent to every man who knew him. Notwithstanding he seemed to many to be cold and austere, yet he was sensitive and tender almost to a fault. I don't believe I ever knew a man who felt greater tenderness and more sensitive for his patients than Dr. Hodgen. I don't believe he ever performed a surgical operation without feeling a sensation of pain at the suffering he was inflicting: he was indeed sharing the suffering with the patient. I don't believe there ever was a more tender father or a more loving husband; and his like will not soon be seen again.

Dr. J. B. JOHNSON.—Dr. Hodgen was a man of so decided a character that it was always impressed upon those whom he came in contact with. I feel that it would be unjust for me not to say something in this connection for the reason that I believe with the exception of yourself (Dr. John S. Moore), there is no gentleman who has been so old an associate of Dr. Hodgen. I was connected with the Kemper Medical College as assistant lecturer to Dr. Richard Barrett, when Dr. Hodgen was first introduced into the college after the resignation of Dr. Stevens. You all know how well his labors were performed. He was not only attached to the faculty, but every member of the class delighted to hear his instruction on surgery. From that time, some time in 1847, I was intimately associated with him, meeting him almost daily in his professional rounds or at his office, or at his home. The attachment strengthened with years. There was that in his character of truthfulness and sincerity which we all love. He was a man having but one side in his character. If he liked, he liked strongly; and if he disliked, he disliked strongly, but it was not expressed; I don't think in all my intercourse with Dr. Hodgen I have ever heard him abuse anybody. I cannot now recall an instance in which he spoke disrespectfully of a professional brother. Certainly in my intercourse with him I have never known him to fail in the performance of his duty towards his patients or towards his professional brethren. It is sad to us too when we remember the names of those with whom we were associated and remember how many of them have passed away. I believe with the exception of yourself, Mr. President, myself and Dr. Stevens all the faculty of Kemper College have passed away. Dr. McDowell, Dr. Barrett, Dr. DeWolff have gone and now Dr. Hodgen has passed away, I do not know, as the gentleman was remarking when I came in, how Dr. Hodgen's place will be filled but I know in my owe heart, that I loved him as a brother, and his memory I shall ever cherish as such, and certainly his character is all one could desire.

DR. G. M. B. MAUGHS.—Dr. Hodgen and have been life-long friends. We graduated together in the class of 1848, we were intimately acquainted at the time and have been ever since; and

I never knew a man of more nobility, of more sterling, unswerving integrity to duty and principle. His great common sense enabled him to perceive the worth of a man and he was always ready to promote it. His peculiar traits were those sterling qualities of unimpeachable integrity. I don't think in his whole life he ever bestowed favor to any one whom he did not think deserved it. It was incompatible with his nature to recognize shams and quackery; and I don't think I ever met Dr. Hodgen in my life that he was not always ready with some kind word or interesting anecdote. I don't think I ever met him without gratification, and I never left him in my life without feeling better from having met him. He has been an honor to the profession, and his loss is irreparable, and one that will long be felt not only in St. Louis but throughout our land. Our children's children will know the name of John T. Hodgen, and it will long be a familiar name. It will be a long time before St. Louis will have another like Dr. Hodgen.

DR. STEVENS.—I do not feel like at this time delivering a eulogy on the character of Dr. Hodgen, and I think it may be more interesting to give a few incidents in his early career. It was my privilege to know Dr. Hodgen during his boyhood. My nearest relatives lived a few years in the same village where his parents live and where he spent many of his earlier years. He was living at Pittsfield, Illinois, when I first became acquainted with the family. I knew his father and mother, his brothers and sisters. Dr. Hodgen was about twelve or fourteen years of age when I first became acquainted with the family and I saw then the loveliness of his character. He was timid, retiring and even bashful, but still I saw the beauties of his character, and I saw where they came from. His parents were persons who enjoyed the respect and confidence of all who knew them and they seemed to be one of the best regulated families that I ever knew. Here was where John T. Hodgen got his sterling qualities. Here, with his father and mother, was the foundation of a character which we all have known and appreciated for so long a time. A few years passed and he came to St. Louis and was admitted to the Missouri Medical College. I found him to be one of the most faithful students that I ever knew. He took hold of the dissections with a vim and a love that I admired and I believed at that time that he was going to make his mark. Some time after that he became an assistant physician in the St. Louis Hospital. I resigned my position in the McDowell College and it happened that the faculty, in looking around for some one to fill the position, selected Dr. Hodgen on account of his earnestness in the department of dissection. I was proud to think that the position I had filled, could go into the hands of such a man as Dr. Hodgen. Many years passed, from fifteen to twenty years perhaps and we pursued our different courses. He in one College, I in

another. He had become professor of anatomy in the Missouri Medical College; and I was occupying the same chair in the St. Louis Medical College. Some time after he resigned the chair in the Missouri College and accepted the chair of Physiology in the St. Louis College. But he was more in love with anatomy than anything else, and he frequently requested me to change chairs with him. I said: "No doctor I can't lecture as you can on physiology; anatomy is my forte." And I remember that occasionally when he would speak of this matter I would say: "You will have to wait until I am dead before you can get my chair." Time passed and I took charge of the St. Louis County Insane Asylum, and Dr. Hodgen immediately followed in my footsteps, and again took my position, I was again proud of the fact that Dr. Hodgen followed me. From that time to the present I have taken great interest in him, and my relations with him, from the very beginning of our acquaintance up to the time of his death have been of the most friendly character. I have respected him, admired him and loved him. A more honorable man I never knew. He was honest to himself, honest to the profession, honest to the community and honest to God. An honest man is the noblest work of God.

DR. E. F. SMITH.—In the character of Dr. Hodgen the elements of honesty and integrity were well blended and harmonized, and these were supplemented by great intellectual excellence. My acquaintance with Dr. Hodgen dated from the spring of 1848, when we graduated from our respective medical colleges. We me tafterwards at the City Hospital, as assistant and resident physicians. I saw then that he was destined to achieve a brilliant future. Our acquaintance gradually ripened into a friendship and linked us together intimately, and I felt happy in enjoying the friendship of such a man as John T. Hodgen. As a member of this society, the archives will bear witness of the earnestness of his work. As a member of the faculty of the institution with which I am connected and to which Dr. Gregory has alluded—the St. Louis Medical College—I regarded him as the ruling genius of the institution. Not only the profession, but the community have sustained an irreparable loss, but I don't know how the faculty is to replace him. His fame is not confined to the city of St. Louis. His name is known all over the United States and in Europe. He deserved all the reputation and fame which he enjoyed. I feel so overwhelmed by the loss of Dr. Hodgen. that I find it difficult to give utturance to my thoughts. His memory will be cherished by all who knew him.

DR. C. H. HUGHES.—I have known Dr. Hodgen for twenty-five years; and when I was a student, his industrious, energetic life, I remember as if it had been an inspiration. It is too soon to attempt to pass an eulogy upon such a man. He was but day before yesterday among us, and we are to-night in the presence

of an overwhelming sorrow. We can do but little more, Mr. President, upon an occasion like the present, than commune with our own grief over our loss. It is a loss to us, and we all feel it, and I am sure we must feel that at this time to attempt to form eulogies in such rounded phraseology as the character of the man deserves—as a man and as a physician—would be futile. For my own part I could not attempt to give utterance to my appreiation of his character.

I can scarcely conceive, Mr. Chairman, that Hodgen is no more. It seems like a vision to think how rapidly he has passed away. Bnt he has gone and we have nothing left to us now but the remembrance of his virtues and manhood. We have nothing but the memory of this great and good man. At some distant day, perhaps some of us may be able to express in better phraseology, our appreciation of his profe-sional and personal worth. For myself I could not attempt to do it now.

DR. WALTER COLES.—I think the motion that the committee appointed to draft resolutions on the death of Dr. Hodgen, be granted further time in which to report was put and carried, but there was no time set at which the committee was to report. It is hardly probable that we shall have so large a meeting of the profession again, and inasmuch as we have perfect confidence in our committee, I would therefore move that when the report is completed it be published in the medical journals of this city, in the secular press of this city, and that a copy be sent to the family without any further action on our part.

Carried.

DR. D.V. DEAN.—I cannot make a speech. I have not words to express myself. I do not think there is any good medical men in the city of St. Louis who knew Dr. Hodgen, who does'nt feel that in his death he has lost a personal fried. During the past six years, I have received great help from Dr. Hodgen. I admired his wisdom,but above all I loved him. I understand that Dr. Gregory has said that Dr. Hodgen lived to work: this remark recalls an incident that occured some years ago. I accompanied Dr. Hodgen to the American Medical Association and we spent some time New York and Boston. Dr. Hodgen wished to call on an old friend—we had to go a little out of our way but it was a personal friend of the doctor's, a man whom he had known as a physician but who had quit the profession of medicine because it was not sufficiently lucrative; and the doctor asked me to accompany him. After introducing me he took from his pocketbook what seemed to be a poem and handed it to his friend saying, "Read it, and then let Dr.Dean see it"; I think Dr. Hodgen would die if he stopped working. It was a poem on work. If this poem is among his effects I think it should be taken care of.

St. Clair Medical Society.

Belleville Ills.. April 29, 1882.

A special meeting of the St. Clair Medical Society was held to-day to take action in reference to the death of Dr. John T. Hodgen, professor in the St. Louis Medical College. A committee composed ef Dr. James L. Perryman, Dr. Washington West and Dr. A. M. Scheel was appointed to prepare resolutions expressive of the society's grief at the untimely death of Dr. Hodgen, and reported the following, which was adopted:

This is an event very distressing to all our fellow-citizens, for it was unexpected; but those who are nearest to him by the ties of consanguinity will permit us to mingle our tears with theirs. To lose such a man is no common calamity to the profession and the world. His fame is white and brilliant, and his name will be treasured and revered, not only in the Mississippi Valley, but wherever medicine and surgery is taught. In aftertimes he will be spoken of and his memory will be cherished as we cherish that of Æsculapius, Hippocrates, Galen, Vesalius, Paracelsus, Haller, Servetus, Ambrose, Paré, Laennec, Willis, Schwann, Magendie, Malgaigne, Harvey, Jenner, Bichat and John Hunter. But with him the scene has closed and nothing can sully his glory and nothing can darken the splendor of his victory. As it hath pleased Him who maketh his pavilion in darkness to remove from his family and our midst our beloved friend, citizen, and teacher, who was so gifted, so generous, so noble in everything that makes the great physician and surgeon and whilst we bow with meekness and resignation before Him that doeth all things well and for our good, we mourn with those who mourn and garland his tomb with flowers.

Resolved, that in the death of Dr. John. T. Hodgen the State of Missouri and the city of St. Louis have lost one of their most talented and honorable citizens, and the medical profession one of its brightest ornaments.

Resolved, that we sympathize with the family in this dispensation of all-wise and overruling Providence which falls upon us all so heavily, but must descend with crushing weight upon those connected with him by ties more tender.

Resolved, that the St. Clair County Medical Society attend the funeral in a body.

Resolved, that a copy of these proceedings be transmitted to the family and published in the *Missouri Republican* and our home papers.

Our friend Prof. John T. Hodgen, who had so many noble qualities of both head and heart, has passed from our midst forever, forcibly reminding us that—

"Our lives like hastening streams must be
That into one engulfing sea
Are doomed to fall,
The sea of death whose waves roll on
O'er king and kingdom, crown and thorn,
And swallow all.

Alike the river's lordly tide
Alike the humble rivulets glide,
To that sad wave,
Death levels poverty and pride
And rich and poor sleep side by side,
Within the grave."

Correspondence.

Article LXXVIII.

Ethics.

Springfield, Mo., April 16th, 1882.

Editors Journal:

I send you a copy of the resolutions passed at our Society Meeting and which the Society voted should be sent to your Journal for publication.

Yours very Truly,
J. E. Tefft, M. D.

Resolutions adopted by the Springfield, (Mo.) Medical Society.

In view of the fact, that there is apparent, a disposition, on the part of certain medical men, to abolish the distinction between legitimate medicine and every species of charlatanism as well as between medical men, and all the varieties of so-called irregulars such as Eclectics, Homœopaths, Electro-paths, Physio-medicals, Hydropaths, faith doctors and others, the Springfield Medical Society deems it a fitting occasion to declare its opinion on that subject, therefore,

Resolved: 1. That we declare our continued adhesion to the doctrine laid down in the Code of Ethics, of the American Association that,

"No one can be considered as a regular practitioner or a fit associate in consultation, whose practice is based on an exclusive dogma, to the rejection of the accumulated experience of the profession and of the aids actually furnished by anatomy, physiology, pathology and organic chemistry."

2. That the letter and spirit of the above cited clause render it inadmissible, for any regular practitioner to hold professional intercourse with Eclectics, Homœopaths or any other practitioners who trade upon special designations or upon special dogmas.

3. That it is not the province nor is it the desire of the medical profession to hamper, fetter or interfere with the opinions or faith of its members yet it is undoubtedly the duty of those whose opinions and practices are in opposition to the universal sense of the profession, to withdraw from it, and it is equally the the duty of the profession and the members thereof, to withdraw their professional confidence and recognition from such practitioners.

4. That the Springfield Medical Society has a right to expect and does expect that its members will govern their professional conduct by the Code of Ethics and will discountenance in

every proper manner all those who trade upon special designations,who claim to practice upon any exclusive system, or whose doctrines and practices are in antagonism with the general principles of scientific medicine.

5. That it is apparent that the movement in the regular profession in the large cities, as well as elsewhere, in favor of indiscriminate recognition of irregular practitioner in consultation is set on foot and encouraged mostly by those who hope for pecuniary prufit from consultation with the various irregular practitioners.

6. That this society recommends to its members and to medical men generally who have cases to be refered to specialists, or who have cases where consultations are required to discourage the selection of such special or consulting practitioners as are known to recognize or advocate the recognition of —on an equal footing—the various forms of irregulars and empirics whether of high or low degree.

7. That a certified copy of these resolutions be forwarded to the Medical Association of the State of Missouri as an expression of the opinion of this Society upon the matters herein alluded to.

Editors JOURNAL:

I beg to correct a statement which appears in the March number of the JOURNAL. On page 271 and 14th line from the bottom, the word "only" causes the sentence to represent that the Missouri Medical School was the only medical school existing in St. Louis, at the time referred to. History, however, shows that the St. Louis Medical School also was then in operation. Attention was kindly called to this error by my friend, Dr. Jno. T. Hodgen, who at the same time conveyed information which renders Dr. McDowell, preeminently the distinguished instructor of distinguished artists. One of these was Hiram Powers, who by universal consent holds the first rank among American sculptors of the century. Another was our honored citizen, J. W. McDonald, Esq., whose several art achievements evince great genius and give promise of a future rivalling in brilliancy, that of his fellow countryman.

In the prosecution of her sublime purpose, almost unique in the history of art, Miss Hosmer arrived in St. Louis Oct. 1st, 1851. It is probable that the relation of teacher and pupil, of which mention has been made, by accident or otherwise, had come to the knowledge of Miss H., and that by it she was justified in the assurance that Dr. McD. would not refuse her the like privilege to which her art longings aspired, and thus enable her to gain, as Dr. Hodgen so happily expresses it, "that instruction on the sunset side of the Mississippi, which professional prejudice prohibited where the day dawns earlier."

WM. DICKINSON, M. D.

Reports on Recent Progress in Medicine.

Article LXXIX.

Report on Surgery. [Prepared for the Journal.] By R. W. Wilcox, M. D. of Vienna, Austria.

The External Use of Iodoform.—Although about twenty years ago it was announced that urine to which iodoform had been added did not become cloudy or foul, yet it was not until within the past four years that it has been prominently before the medical world as an antiseptic. At present the discussion concerning its merits is active while its true value is by no means fully determined.

The forms in which it is used are:

1. The well known yellow crystals.
2. These crystals reduced to a fine powder.
3. This powder combined with various balsams or volatile oils.
4. The iodoform collodion.
5. The iodoform ointment.
6. The sticks, with cocoa-butter or with gelatine.
7. The gauze, in which the iodoform is retained by parafine, glycerine and alcohol.
8. The various solutions in alcohol, ether or chloroform.
9. The emulsion (50 per cent.) for hypodermic injection with glycerine, water, which must be added to insure a perfect emulsion, and a small quantity of tragacanth. The last being used in surgery although hardly coming under the head of its external use.

Owing to its slight solubility in water there is no aqueous solution in use. Of the above forms the powder, the stick and gauze are the ones most frequently seen and upon which most of the observations have been made.

The dressing with iodoform is a comparatively simple process whether for primary wounds or after surgical operations, if union by first intention can reasonably be expected, the bleeding points are secured preferably with catgut, the powdered iodoform is sprinkled carefully and thoroughly into all corners and over all parts of the exposed surface to the thickness of a knife blade, the wound accurately stitched together, precautions as to proper drainage being observed, several layers of iodoform gauze and a layer of Mackintosh, outside, being laid over

and about the part, an ordinary cotton retaining bandage being placed over the whole, the dressing is complete. The fine powder is generally preferred to the crystals, because the same weight of iodoform will be more useful. Closer contact of the wounded surfaces is possible, the superfluous iodoform will more easily be eliminated as the absorpiton will be more rapid and it is said not to "ball up" in the wound. The crystals would be more likely to be irritating and so hinder primary union while they would not be so rapidly absorbed and thus the danger of iodoform poisoning would not be so great. The etherial solution is too irritating for this use, while the combination with balsams or oils would very likely be followed by the formation of masses in the wound and so prove to be irritating. The sprinkling of the iodoform can be done with an ordinary spatula but is usually done with an ordinary kitchen dredger or better by an apparatus consisting of a cylinder from which the iodoform is expelled in a fine cloud of dust by means of the ordinary rubber hand bulbs. The cylinder is advantageously made of glass that the amount used may be known but the glass should be brown or yellowish that chemical changes may not be set up by the action of the sunlight. Gauze with the powdered iodoform simply dusted in, may be used instead of the prepared article but it has the disadvantage that the amount of iodoform in the gauze is ever an uncertain quantity.

In the case of a wound which must remain open, as after the removal of a sequestrum, the exposed surface is covered with a thin layer of the powder and the cavity remaining is filled with the iodoform gauze, the rest of the dressings being applied as before.

The sponges, compresses, as well as the operator's hands should be disinfected in a solution of carbolic acid. For the syringing out the wound at the time of the operation clean water, only, is used. As to the amount of iodoform to be left in the wound some of the more earnest advocates of this dressing speak of one hundred to *two hundred and fifty grams* (!) but the more conservative assert that twenty to forty grams in children and in adults not over seventy grams should be used.

The indications for the removal of the dressing are substantially the same as for a complete Lister but not so much stress is laid upon the soaking through of the discharges, the reason given being that iodoform has a more permanent action than other antiseptics. It is stated that the discharge from the wound is more often muco-serous or purely serous than purulent. The dressings removed, the surrounding skin is syringed with clean water, the surface of the wound dried with absorbent cotton and the dressings are replaced as before. No more iodoform is to be used. An iodoform exanthem (erythema or possibly eczema) is not infrequent and is to be treated as if it occurred under any other dressing.

The sticks of iodoform of convenient size, are used in fistulæ and pockets where a prolonged action is desired and are often the final use of iodoform in the small fistulæ after such operations as laparotomy, for instance.

In reference to the action of iodoform on local tuberculous manifestations some wide sweeping assertions have been made. After extirpation of any fungous mass the wound is to be treated in the ordinary iodoform method, while the removal of the disease in the soft parts is not said to be necessary, the bone involved must be thoroughly removed. It is claimed that the tendency to relapse is lessened, that granulations disappear and new tissues are formed capable of cicatrization. Concerning the strictly medical use of iodoform, in spite of its theoretical value, very little definite is to be founed in the recent medical literature beyond the fact that it is less irritating than any other compound of iodine.

Although at first sight the iodoform dressing is beautiful in its simplicity yet certain disadvantages suggest themselves. At the outset the abominable and penetrating odor which, in some parts of America owing to its earlier use in the treatment of venereal lesions, is to the public mind evidence enough to found a diagousis of something venereal, a supposition certainly upleasant to any patient upon whom this dressing may be used. Then the cost of the iodoform is an item to be considered which, although the writer is not in a position to state accurately, he believes it to be greater than the complete Lister dressing. Further the insolubility, which prevents its use in the disinfecting of hands, sponges and instruments. This renders the experiments and their results not entirely trustworthy because, as far as the writer knows, no one has cared to dispense with the ordinary precautions in regard to sponges etc., and some go so far as to use a complete Lister over the iodoform-filled wound. The most important part of the discussion has lately turned upon the danger in the use of iodoform externally. Primary poisoning will not be discussed as it may not exist, the supposed cases occurring during the first few days after the operation and many with some appearance of reason, be attributed to the anæsthesia. However, certain patients, four or more cases have been reported, have died when the cause of death has not been easily discovered on grounds other than that it was due to the use of iodoform, however much certain euthusiasts have to explain away these causes. In all the cases the amount tried iodoform used has been large although within the limits that are of freely spoken of by those who have had the most experience in its use. The clinical history of the cases does not show much variation and the symptoms are mainly those referable to the brain and in particular suggest tubercular meningitis, such as strabismus, dry tongue, repeated vomiting, rapid pulse and normal temperature, twitching of muscles, delirium and coma-

Two of the cases had the boat-shaped abdomen. The antopsies showed in one case a slight cerebral anæmia, in the next a normal brain, in three of the cases a fatty degeneration of the liver and kidneys. The conclusion to be drawn seems to be that iodoform is by no means a thoroughly safe antiseptic in amounts above those mentioned in this report.

In conclusion will be given briefly the claims set forth by those who are the strongest supporters of this form of dressing. That it is for all sorts of wounds a lasting and a safe antiseptic, its local action is unirritating, even the hypodermic injection of the emulsion being followed by no reaction. It is a local anæsthetic and it does not in thin layers hinder union by first intention. The general result is that wound fever rarely follows but should there be fever it is not of a septic character. Erysipelas about a wound is seldom observed. The simplicity of the application is evident while the gauze will retain its efficacy for at least a year. On account of its slow and powerful action it is especially useful as a dressing in operations about the natural orifices of the body.

Certainly, then, if iodoform can fulfil all the claims of its most enthusiastic supporters, the extension of its use to surgery is to be considered a great addition to the resources at our command.

ARTICLE LXXX.

REPORT ON THE PROGRESS OF SURGERY. [Prepared for the JOURNAL.] BY FRANK J. LUTZ, M. D., of St. Louis.

GASTROSTOMY.—DEATH ON THE EIGHTH DAY, FROM PERITONITIS, CAUSED BY GANGRENE OF THE TRANSVERSE COLON! PALPATION OF VESICAL CALCULI IN CHILDREN.—EXCISION OF PRIMARY SYPHILITIC SORE.—MODIFICATIONS OF PEAN'S OPERTION.—NEPHRO-LITHOTOMY ON ACCOUNT OF ANURIA.

GASTROSTOMY.—DEATH ON THE EIGHTH DAY, FROM PERITONITIS, CAUSED BY GANGRENE OF THE TRANSVERSE COLON!—Dr. Lauenstein, of Hamburg, reports a case of resection of the pylorus for removal of an oval shaped tumor, about the size of a fist, from a woman 34 years of age. The growth had existed for about eleven months and was the source of much discomfort and pain. It could be readily pushed into the right hypochondriac region without much pain to the patient, whilst an attempt to force it into the left hypochondriac region gave rise to considerable pain. Its usual site was the umbilical region; it was lobulated and in the sulcus between the lobes distinct pulsation was felt. There were no characteristic symptoms of stenosis of the pylorus.

The incision was made (according to the suggestion of Billroth vide the JOURNAL March 1882) over the most prominent part of the tumor in the linea alba and the flesh-colored hard tumor with large veins presented itself. On being drawn into the abdominal wound it was at once a recognized as the pyloric end of the stomach. During the effort to isolate the tumor it was discovered that the connection of the stomach with the omentum was not limited to the greater curvature but extended high up along the posterior wall of the stomach, almost up to the lesser curvature. With such modifications as the nature of the case demanded, the tumor was removed and the duodenum attached to the greater curvature of the stomach. The operation lasted five hours.

The extirpated pylorus measured 15 c. m. at the greater curvature and at the lesser 10 c. m., and weighed 295 g. On the posterior wall of the pylorus an ulcer, with well defined smooth edges and with a nodular bottom, was found. The walls of the stomach, especially the muscular coat, were enormously thickened.

Under the microscope the bottom of the ulcer, especially the nodules there found, were seen to consist exclusively of white blood-corpuscles, nor did specimens obtained from other parts show any characteristic elements of a carcinomatous nature.

The patient did well for five days. On the sixth day she complained of abdominal pain, the abdomen became distended in the region of the wound, which had healed, and there was slight dullness on percussion. The pulse, temperature and respiration began to increase, the tongue became coated with a brownish fur; great thirst, coldness of the extremities, death.

A partial post-mortem only was allowed. It was found that the abdominal wound was firmly healed and the omentum which completely covered the small intestines was united with the wound. In the upper portion of the omentum, near the transverse colon, there was found a circumcribed abcess containing about a teaspoonful of thick white pus. The transverse colon itself, was drawn downward near its center; that portion of its wall from which the stomach had been removed was flabby, thin and of a greenish dark color. When touched it tore readily and thin light-brown fæces escaped. The stomach was firmly united with the duodenum and slightly adherent to the under surface of the liver.

On opening the colon, its mucous membrane corresponding to that portion described above was found to be black and the line of demarcation between it and the healthy structures distinctly drawn.

The reporter attributes the peritonitis from which the patient succumbed on the eighth day to the gangrene of the transverse colon. He suggests that the abnormal connections which had formed between the transverse colon and the posterior wall of the stomach on account of the weight of the tumor and its constant dragging and the numerous ligatures which were re-

quired during their removal, may have disturbed the blood supply to the gangrenous portion without supplying sufficient collateral circulatiou to such an extent as to cause death of the part. This view of the author is supported by the experimental reserches of O. Madelung reported in the *Verhandlungen der Deutshen Gesellschaft für Chirurgie X* congress p.415 *et seq.* — in which he has shown that gangrene of the intestines can be produced by ligaturing the arteries which supply it, as also by detaching its mesentery.—[*Centralblatt für Chirurgie.*

PALPATION OF VESICAL CALCULI IN CHILDREN.—In No. 11. of the *Centralblatt für Chirurgie,* Richard Volkmann contributes the following concerning the diagnostic value of rectal examinations in cases of vesical calculi in children:

"The value of a rectal bimanual examination in children suffering from stone in the bladder is recognized by all. The examination is made whilst the patient is thoroughly under the influence of an anæsthetic, with complete relaxation of the abdominal parietes and the bladder but slightly distended or empty. Two fingers of the left hand are carried as high up into the rectum as possible; the right hand presses upon the abdomen above the symphysis and forces the bladder downward toward the rectum, until both hands meet. In children the whole bladder can be palpated by this method and even small calculi are readily detected. It requires considerable practice and experience, however, to determine the size of the stone, although it can be distinctly felt and moved about between the fingers of both hands, and at first I was often deceived concerning the size of the calculus; usually I considered the stone smaller than it proved to be after being extracted."

"Of late, I have found, however, that there exists a yet more certain method to determine the size of a calculus in children by direct palpation. By means of the fingers of the left hand, which have been introduced into the rectum and guided by the right hand which rests upon the abdomen the stone is lifted upon the os pubis and held there. It is an easy matter then to completely encompass it and to allow those about you to handle it. If the calculus is not too large it is possible to raise it together with the skin of the groin so high as to tie it with an elastic ligature. I do not mention this, however, to suggest the elastic ligature as a method of removing vesical calculi, but because it may be possible to utilize it in such moveable tumors of the bladder, as are observed in pediculated papillomata and myomata."

"In the last four cases of stone in children, which came under my observation I succeeded very readily and without exception in dislocating the calculus upon the os pubis and in encompassing it with my fingers. The last stone which I palpated in this manner was as large as a chestnut."

In adults this manipulation can, of course, be performed only in spare subjects with thin abdominal walls.

EXCISION OF PRIMARY SYPHILITIC SORE.—From six cases of excision of the primary lesion of syphilis, performed by Dr. Louis Jullien, Paris, he draws the following conclusions:

1. The excision of the chancre causes no local disorder and hastens the disappearance of the ulceration.

2. Under certain circumstances, with which we are not yet acquainted, it suppresses all manifestations of syphilis.

3. Under certain conditions it diminishes to such a degree the effects of the poison that it seems to give the patient the benefit of a real vaccination.—[Transactions International Medical Congress, Vol. II, p. 403.

MODIFICATIONS OF PEAN'S OPERATION.—The following modification of Dr. Pean's operation for the removal of the uterus as practiced in the removal of a large interstitial fibro-myoma of the womb, are suggested by Dr. De Zwaan:

1. An abdominal incision is made in the belly large enough to allow of the tumor being easily drawn out of the abdominal cavity without any injury to the peritoneum.

2. The abdominal cavity is immediately but temporarily closed.

3. The tumor is surrounded with an elastic band.

4. The temporary stitches are replaced, one by one, by permanent peritoneal and surface sutures.

The purpose and aim of these modifications are:

1. To protect the organs of the abdominal cavity against a sudden chill.

2. To obviate all risk of the bowels being forced from their position.

3. The prevention of hæmorrhage.—[Ibid. Vol. II, p. 232.

NEPHRO-LITHOTOMY ON ACCOUNT OF ANURIA.—The following interesting case (*Centralblatt für Chirurgie* March *25.*) illustrates the soundness of the rule, which advises against extirpation of the kidney when the organ is otherwise healthy and a calculus is found in it. It appears probable that those causes which lead to the formation of stone in the kidney act upon both kidneys alike and the removal of one exposes the patient to all the dangers which might result from the formation of a calculus in the other.

The patient was an unmarried lady 27 years of age. She had suffered for ten years with violent cramp-like pains during urination, radiating occasionally into the left side. Urine dark, of neutral or slight acid reaction. Dilatation of the urethra with incisions into the sphincter vesicæ, was performed on the 13th of October 1881. This was followed by cystitis and subsequently by a retro-peritoneal abscess which latter was by

introducing the finger into the abscess cavity, found to be an abscess of the pelvis of the left kidney.

The daily rise of temperature had not taken place any more until February 8th 1882, when the thermometer registered 38.1° C. in the morning. No discharge of urine. Afternoon temperature 40.4°. Rigor. Catheterization was performed but no urine, only mucus and a small stone being drawn. Pains in the right lumbar region radiating toward the bladder. The following diagnosis was made: complete obliteration of the left kidney by the abscess and momentary closure of the right ureter by a calculus resulting in complete anuria.

Evening temperature 38.4°. Nausea. Anuria.

Feb. 9. Morning temperature 39.1°. Noon 39.5°; evening 39.4°. Constant nausea, with tendency to vomiting. Vomited gall-colored mucus twice. Pain in the right lumbar region radiating toward the bladder; no urine; no convulsions. Uræmia began to set in and it was determined, in order to avoid imminent death to search for and remove the calculus.

An incision was made in the lumbar region from the end of the 11th rib to the crest of the ilium and the muscles and deep fascia were divided until the fatty capsule of the kidney was, reached. Then a second vertical incision was made from the lower end of the first, on a level with the crest of the ilium and extending backward. The capsule of the kidney was then divided and it would have been an easy matter to remove the kidney which could not however, for obvious reasons, be done. In order to reach the pelvis of the kidney and the ureter, the anterior surface of kidney was freed from the capsule and the stone which obstructed the ureter was felt to glide back into the pelvis; at the same time, urine followed from the bladder. The calculus was then removed by being again forced into the ureter and the latter cut open over it. The stone was smooth, elongated and about the size of a pea. Four other calculi were detected in the pelvis of the kidney and extracted. The wound of the ureter was sewed by means of three silk sutures, the ends of which were left to hang out of the external wound.

Feb. 10th, Morning, temperature 36.6, pulse small and frequent The dressings are saturated with urine. Noon temperature 38.°0. No urine per vesicam but has passed through wound. Some nausea, but less than yesterday. Evening temperature 38.°5.

Feb. 11, temp. morning 38.°1. Evening 38.°3, a little stronger; nausea continues: Feb. 12 temp., morning, 37.°6. Evening, 38.°3. Urine escapes through wound. Feb. 13, Rigor during the night 40.°8. No urine in the dressing. The sutures of the ureter are cut, as is the ureter, and the latter was fixed in the lumbar wound by means of sutures. The patient was still alive on the 12th of March, and the wound which for some days did not look well, presented a clean appearance.

The condition as detailed is no doubt rare; but even in

those cases in which a ureter is plugged by a calculus, even though the other kidney performed its function and the urine from it flows into the bladder, it is advisable to perform nephro-lithotomy in order to save the other kidney.

ARTICLE LXXXI.

REPORT ON DERMATOLOGY. By A. H. OHMANN-DUMESNIL, A. M., M. D., of St. Louis.

PURPURA IN PHTHISIS.—M. du Cazel has given record of a case to the Société Médicale des Hôpitaux, (*France Médicale*, March, 14, 1882.) of a singular variety of purpura occurring in a young, tubercular patient, the daughter of a tuberculous mother. The purpura presents a violaceous tint during the day; at night it becomes scarlet and very painful and is accompanied by swelling. These changes are seen every day since three months, between 7: 30 and 8 o'clock. No medication has succeeded in making these disappear. It is a remarkable fact that the cough and dyspnœa of this patient became less upon the appearance of the purpura. Since several days, the purpura has improved considerably and the crises of dyspnœa have reappeared.

URTICARIA COINCIDENT WITH ICTERUS.—Dr. Bonnet writes to the *Journal de Médicine et de Chirurgie Pratiques*, March, 1882, his observation of a curious case of urticaria coincident with a simple icterus. The conditions both yielded readily in a few days—in about eight days. For three successive days the urticaria reappeared and became generalized but finally disappeared as the icterus subsided. Such cases are sufficiently rare.

Graves cites eight or nine cases of patients who had acute articular rheumatism, and becoming suddenly yellow, had the icterus followed by the urticaria. On the other hand Tilbury Fox mentions as a cause of urticaria, the circulation of irritating products such as uric acid or bile, which upon reaching the surface of the body, oxydise and become more active.

MEDICINAL ERUPTIONS.—Dr. Louis Conyba, in the same journal, reports two cases, peculiar on account of the rapidity of their production and the mixed nature of one. A patient, weak and anæmic was, during July, the subject of abundant sweat which was aggravated at night. He was ordered one-half milligramme doses of sulphate of atropine night and morning. After taking the third pill, being the absorption of a milligramme and a half in thirty-six hours, a scarlatinous erythema appeared over the skin of the anterior part of the thorax, along the anterior aspect

of both arms symmetrically and accompanied by marked itching. There was no dryness of throat nor dilatation of the pupils. The sweating was hardly influenced. The treatment was discontinued.

The other patient was a woman who had a swollen and painful "ganglion" in the right inguinal region. She was ordered to rub it with mercurial ointment containing belladonna (4in 30.) The next day, after two applications, the patient found in the inguinal fold an erythematous blush well-marked with numerous small purulent, miliary vesicles; but, besides this, she had a generalized discrete eruption of small papules with a few patches having a red bottom, disseminated in small numbers about the superior limbs, whilst she was affected with salivation, metallic taste, gingivitis and abundant diarrhœa.

There can be no doubt that the eruption was due to the substances employed. The red patches were due to the belladonna and the small papules with or without a small miliary vesicle at the summit, owed their origin to the action of the mercury.

XANTHOMA TUBERCULOSUM ET STRIATUM.—Dr. Geo. Henry Fox describes a peculiar form of xanthoma in the *Archives of Dermatology*, Jan. 1882. The patient, a lady æt. 32, had her attention first drawn to a change in the condition of her palms, the natural creases having grown lighter in hue than the surrounding skin. In a few months numerous small yellowish nodules made their appearance just below the elbows. There was no pain or itching. On examination of the palmar surface of the hands, the web of the fingers, the anterior aspect of the wrists, the bend of the elbows and the axillary folds showed that the skin had assumed a pale yellowish or light ochre hue in the natural creases, and when the parts were extended this peculiar striated condition became very apparent. Symmetrical groups of yellowish tubercles existed on the extensor aspect of the forearms just below the elbows. They were numerous, closely set though not confluent, of the size of hemp seeds and of the color of chamois skin. The eyelids of the patient were unaffected. Six months later there was no apparent change in the skin. The author proposes to have a new term to express this condition and suggests xanthoma *striatum*.

THE PARASITE OF LEPROSY.—The observations of Hansen on the bacillus of leprosy, (*Annales de Dermatologie et de Syphilographie—Practitioner*) confirmed by Heiberg, Bidenat and Winge have recently received additional confirmation from M M. Cornil and Suchard. These investigators found that when a portion of leprous tissue was teased out in water, numerous bacilli were seen in active movement. In sections stained with methylaniline the characteristic cells of the diseased tissue and the endothelium of the blood-vessels were seen to contain rods and elongated spheroids. The cells of the epidermis covering the leprosy nodules contained no parasites, which may account, the authors

suppose, for the rarity with which the disease is propagated by contagion. In one case, in which the liver was found in a condition of hypertrophic cirrhosis, the bacilli were found in the newly-formed cells present in the interlobular connective tissue, and were also found in the hepatic cells.

TREATMENT OF RASH DUE TO BROMIDE OF POTASSIUM.—Duckworth reports in the *Buffalo Medical and Surgical Journal* a case of acneiform eruption due to bromide of potassium in which the patient continued the use of the remedy, the treatment being entirely local. The patient was a woman twenty years old and epileptic, confluent acne being produced by the ingestion of a drachm of the bromide. The following lotion was applied:

℞ Sulphuris precipit.....ʒij.
Spts. Camphoræ.....ʒj.
Aq. Calcis.....ʒij.
M.

Gruel was used instead of soap and in a couple of weeks the hard and sluggish papules had disappeared and there was no return. The author also mentions the fact that arsenic is given with the bromide to control the eruption produced by the latter, but a sudden increase of it has been known to cause a rash to appear.

RHUS TOXICODENDRON.—Dr. R. L. Hinston (*Southern Medical Record*) writes to add another remedy to the long list already obtained for the treatment of the eruption caused by poison oak. He offers a specific in "sassafras tea." It is an infusion of the root, or better, of the bark of the root of *red* sassafras. The diseased surface is to be kept constantly wet with the cold infusion. Where the disease is aggravated especially by the application of other remedies, he advises drinking the warm infusion three times a day in lieu of coffee or tea. The author also claims the remedy a success in other skin diseases but fails to give a mention of them.

CONSTITUTIONAL EFFECT OF CHRYSOPHANIC ACID.—This is a remedy which is so extensively employed in the treatment of skin diseases, that its constitutional effects should be readily recognized, especially by the general practitioner in order not to push it too far. Prof. Charteris (*Lancet*) ordered a boy nine years of age and suffering with psoriasis to be rubbed with chrysophanic acid ointment, (one drahm to the ounce of vaseline). Four days later the boy felt sick and vomited. The strength of the ointment was diminished one-half, and the patient recovered. By covering carefully a portion of the body affected, and rubbing the ointment on a healthy portion of skin it was found that the disease disappeared, although more slowly then when applied directly. This shows the constitutional effect of the drug in its action.

CHRONIC ECZEMA PALMARIS.—Dr. J. W. H. Lush (*British Medical Journal*) has found the following lotion of service in allaying the intense irritation which so often accompanies eczema of the palm:

℞ Sodæ bicarbonat... ....Ʒij.
Potass. bicarbonat.....Ʒj.
Glycerini.....Ʒiss.
Tinct. Opii.....Ʒij.
Aquæ ad.....Ʒviij.
M.

He remarks: I was at first induced to use it in a case of eczematous irritation, in which every application I had used proved of no avail, on account of the marked relief from pain which the local use of the bicarbonate of soda frequently gives in severe burns. Only a few days ago in the case of a lady suffering from chronic eczema of the legs, accompanied with intense itching, I used it with the most beneficial and immedtate result, the patient showing me some half dozen prescriptions which she had used with little or no success. I consider the bicarbonate of soda lotion almost, if not quite, a specific for the relief of the intense burning irritation which often attends chronic eczema, more especially if the patient have a rheumatic tendency.

RED SWEAT.—The *Medical News* contains the following extracted from the *Lancet*, March 11, 1882: It has long been suspected that the red as well as the blue color occasionally observed in perspiration in due to the presence of bacteria. In a woman whose sweat especially in the axillæ, had a red tinge, Hoffmann, in 1873, found that uniform red masses adhered to the hairs, but he did not ascertain their nature. Pick observedin a peculiar case of skin disease reddish masses of bacteria on the hairs. Eberth noticed bacteria in yellow sweat. Additional observations of the same kind have been reported by Babesin, of Pesth. A woman twenty-six years of age presented pale red sweat in the right axilla, where the skin and hair were also slightly reddened. From time to time the perspiration became blood-red in color, associated with hysterical and nervous disturbances. A sister who slept with her also became affected in the same manner, the perspiration in the right axilla becoming red. A third case presented itself in the case of a young, healthy man, who complained of occasional blood-red sweat; and a fourth in a young woman. In all, the symptom was associated with troublesome itching. Microscopical investigation yielded in all the cases a similar result. The hairs of the axilla were thin, pale red, brittle, and surrounded with a colloid looking, rusty or bright red sheath, in places of considerable thickness, and having a rough surface. It consisted of red masses presenting a radiating striation, more or less confluent, apparently proceeding from fibres of the cortex of the hair or from some

broken part of its surface. The radiating striation was found to be due to the aggregation of round or ovoid bacteria, scarcely a micro-millimetre in diameter, which were united in zooglœa masses by a reddish intermediate substance. Nodular swellings on the hair were produced by an infiltration of the organism between the separated fibrils. The roots of the hair were free from bacteria. The red tint of the sweat was found to depend upon numerous roundish masses of zooglœa, resembling those of bacterium prodigiosum. The bacteria were deeply colored by anilin and hæmatoxylin, and were rendered more distinct on the addition of acetic acid or liquor potassæ, while the zooglœa shrank under the influence of alcohol, ether and turpentine. Sulphuric acid changed the red color to violet, and then to violet-blue. In sterilized culture solutions the bacteria multiplied slowly. The conclusions drawn from these observations are that the red sweat often found in the axilla is colored by a sphero bacterium, the developments of which give rise to an excessive perspiration, and sometimes to brittleness of the hair, itching and slight tinting of the skin. The red sweat appears to be contagious. The bacteria resemble on the one hand, the colorless zooglœa found in hair, and, on the other, certain chromogenous bacteria, especially bacterium prodigiosum, from which it is distinguished by the brick-red color of the intermediate substance. It is more difficult to cultivate than bacterium prodigiosum, but gives essentially the same chemical reactions.

DERMATOLYSIS.—We read in the New York *Medical Record*, April 1, 1882, that Dr. H. G. Piffard, Professor of Dermatology at the University Medical College, presented a unique illustration of dermatolysis in the person of Herr Hoag, the so-called "India-Rubber Man," or the man with an elastic skin.

Two hundred and twenty-five years ago a case of loosening of the skin, or true dermatolysis existed, and has been described by Makron (?), who says that "in 1657, a Spaniard, twenty-five years of age, presented himself to our hospital, who could grasp the skin of the right breast, or shoulders, and stretch it out until it covered his mouth, and a like elasticity existed in other parts of the body." The skin of Herr Hoag has the normal appearance, except that the small veins show much more distinctly than normal. He has always been aware that his skin was looser than that of other persons, and noticed it when compared with the skin of other boys. When drafted for military service in his native country, the surgeon in examining him noticed, to his surprise, that the skin could be stretched out in broad folds, and on account of this abnormality regarded him as entitled to exemption from doing military duty, and he was discharged. While under the observation of dermatologists in Vienna, a section of skin was removed from the anterior aspect of the right arm, for microscopical examination, and the result was that there was no change in the skin itself, but there was a

decided absence of the subcutaneous fat and cellular tissue, which permitted the skin to slide and be stretched over the body. At any part of the body the skin did not stretch to a very great extent longitudinally, but transversely or laterally it could be drawn out to five or six, or more times the normal distance, and as soon as the traction was removed it returned to the normal position and appearance.

MOLLUSCUM SEBACEUM OF THE SCROTUM.—Dr. John A. Octerlong details a case of this affection in the April number of the Louisville *Medical Herald*. The patient is a farmer aged thirty-eight and married, whose general health has always been good. Five years ago he first noticed a small growth on the right side of the scrotum near the penis. It slowly enlarged and was followed by others. At present the skin is clear and no comedones or other indications of a disturbance of the sebaceous glands. On the anterior aspect and sides of the scrotum are a number of tumors of different sizes most numerous and largest near the peno-scrotal junction, being here in clusters and hidden in the hair. An idea of their relative number and size may be formed from the accompanying figure, kindly loaned by Dr. D. Reynolds, editor of the *Herald*.

Fig. 8.

(One half natural size.)

The skin covering the tumors is white or of a pale pinkish hue, and here and there delicate vessels can be seen traversing them in different directions. No trace of the orifice of a duct can be discovered in any of them. Some of the tumors are pedunculated, others sessile and many merely projecting above the skin and freely movable. There are sixty on one side and fifty-five on the other of the median raphè.

Prof. McMurtry made a microscopical examination and found the connective tissue of the glandular wall greatly hypertrophied and the interior divided into lobules by septa of hypertrophied connective tissue. The contents were composed of a whitish, cheesy mass of unpleasant odor, consisting of large quantities of epithelial cells, fat and granular débris.

The points of interest are the great number of tumors, their unusual site, the absence of any similar disturbance in other parts, and the age at which it occurs.

Obituary.

Article LXXXII.

John T. Hodgen, M. D. LL. D.

Died at his residence, April 25th, at 7.30 P. M., Dr. John T. Hodgen. His demise was sudden and no such shock has been felt in this city since the announcement of the death of our late President, Garfield.

Dr. Hodgen was one of the representative men of this city an ornament to society and an honor to the profession. He was born Jan. 17, 1826, near Hodgenville, LaRue County, Ky. Afterwards his family settled at Pittsfield, Ill. He was sent, when a youth, to Bethany College, Virginia, but soon after entered upon the study of medicine in St. Louis, Dr. Jos. N. McDowell being his preceptor. He graduated from McDowell's College in his twentieth year and entered the City Hospital as interne. For thirty-five years he has been engaged in the practice of his profession, and during nearly all of that time he was a teacher. This was his true vocation as was he preeminently adapted to impart knowledge. Himself quick to grasp and comprehend, endowed with a remarkable memory, the Mississippi Valley has never possessed a better teacher or a more enthusiastic devotee to higher medical education than Dr. John T. Hodgen.

Although constantly occupied by his large practice he was always found to have time to devote to those seeking his advice and this was sought for from all quarters, his sterling qualities making him respected, admired and beloved by all who had the fortune to come in contact with him.

As a writer he was terse, clear and to the point. It is unfortunate that he had not the time to utilize the vast amount of material that came under his observation; for he could render every thing instructive, and put it in such a light as to awaken a new interest in it.

He was devoted to his profession, generous and *honest*. We cannot say more. He was a man

"Whose like we ne'er shall see again."

A more extended notice of this great and gifted man will appear in our next number.

The students of the St. Louis Medical College assembled April 30th, at the College building, and adopted the following resolutions respecting the death of John T. Hodgen, Dean and Professor of the institution.

WHEREAS: Death has removed from our midst our beloved Dean and Professor; be it

Resolved:

That by his death the students of the St. Louis Medical College have suffered the irreparable loss of an invaluable instructor and warm friend.

Resolved:

That we strive to profit by his teachings, and emulate the promptness and untiring zeal which he at all times exhibited in the relief of suffering.

Resolved:

That our heartfelt sympathy be extended to his family in their bereavement.

Resolved:

That these resolutions be published in the daily papers and Medical Journals of the city and a copy be presented to the family.

Signed { Students of the St. Louis Medical College.

Editorial.

Article. LXXXIII.

The Code of Ethics.

The action of the New York State Medical Society, in regard to the code of ethics has raised quite a ripple of excitement lately. Although we do not wish to place ourselves on record as favoring extreme measures, we think that the time has come when it is absolutely necessary to carefully and completely revise the code. It was made in times that have gone by long since, and social, political and scientific changes of such magnitude have occurred since then, that a radical change, in some respects, has become absolutely necessary.

The regular profession cannot afford to be regarded as the most illiberal, and it is fast approaching this unenviable reputation on account of its adherence (?) to a code that is as illiberal as it is narrow.

Besides, it has been a matter of common observation that the code is a net designed to hold little fishes, whilst the large ones break through and escape unhurt. This must be stopped, and now is the time to do it. The American Medical Association owes it to the profession and to itself to make such alterations as will prove of benefit to the young as well as to the old practitioner.

Reform is necessary and will eventually accomplish itself; the gentlemen who will assemble at St. Paul may as well aid this move with a good grace as wait until the force of circumstances compels them to do it.

Book Reviews.

Article LXXXIV.

Essentials of the Principles and Practice of Medicine. A Hand-Book for Students and Practitioners. By Henry Hartshorne, A. M., M. D. Fifth Edition, thoroughly revised and improved with 144 illustrations, 12mo. pp. 609. (Phila. Henry C. Lea's Son & Co. 1881. St. Louis: Hugh R. Hildreth Printing Co.)

Hartshorne's "Essentials" has always been a favorite of medical students and of those who do not think that diseases merit more than a very cursory examination to be well understood. To behold the principles and practice of medicine given in a volume of six hundred pages, and to pretend that even the essentials can be given in such a small space is, to say the least, quite an assumption on the part of the author. We do not so much criticize the *manner* of doing the work as the *work* itself. It is too much and not enough. When we see physicians carefully avoiding long and interesting monographs to consult books, as the one under consideration, it seems as if medical thought was going on a downward path with great rapidity, and as if the moral responsibility of other lives was at a very low ebb.

For instances, affections of the kidneys and bladder as disposed of in twenty pages; the brain and nervous system occupies sixty-five pages; insanity being considered in two pages; twenty-seven pages suffice for skin diseases, and so on to the end. That such a short summary is totally inadequate is obvious, yet as long as such books are demanded they will be furnished, and we must here say in justice to Dr. Hartshorne, that he has well done his work and although, at times, he becomes almost dogmatic in his assertions, the intention is perhaps rather to impress the reader with the importance of the statement than for any other reason.

To take up *seriatim* the various affections mentioned and the treatment advocated would necessitate the writing of a larger volume than is before us, as the many points omitted and the different opinions on the subjects considered would demand it.

The only hope that we can express in reference to this work is, that it may serve to whet the appetite of its readers and induce them to devote themselves to larger and more explicit works.

Books and Pamphlets Received.

Article LXXXV.

Lectures on Diseases of Children. A Handbook for Physicians and Students. By Edward Henock. 8vo. p 357. (New York: Wm. Wood & Co. 1882.) March number Wood's Library Standard Medical Authors.

A Clinical Handbook, on the Diseases of Women. By W. Symington Brown, M. D. 8vo. pp. 247. (New York: Wm. Wood & Co. 1882.)

Gonorrhœal Ophthalmia. Its Complications and results. Iridectomy for Artificial Pupil. By John Lundy, M. D. (Reprint from *Michigan Medical News*, Feb. 25, 1882.)

An Index of Surgery. Being a Concise Classification of the Main Facts and Theories of Surgery, for the Use of Senior Students and others. By C. B. Keetley, F. R. C. S. 8vo. pp. 320 (New York: Wm. Wood & Co. 1882.)

Proceedings of Meetings held Feb. 1st, 1882 at New York and London, to express Sympathy with the Oppressed Jews in Russia. 8vo. pp. 50. (New York: Printed at Industrial School of the Hebrew Orphan Asylum, 1882.)

A Treatise on the Science and Practice of Medicine, or the Pathology and Therapeutics of Internal Diseases. By Alonzo B. Palmer, M. D., LL. D. 8vo. pp. 903. (New York: G. P. Putnam's Sons, 1882.)

De La Lithotritie Rapide. Par le Dr. Reliquet. 8vo. pp. 79 (Paris: Adrien Delahaye et Emile Lecrosnier. 1882.)

Intermittent Spinal Paralysis of Malarial Origin. By P. Gibney, A. M., M. D. (Reprinted from the *American Journal of Neurology and Psychiatry*, Vol. I, No. 1, 1882.)

Laceration of the Perineum. (Reprint from *Obstetric Gazette*).

Abortion and its Lessons. By O. R. Horrick, M. D. (Reprint from *Michigan Medical News*).

The Use of Constitutional Remedies in the Treatment of Ear Disease. By Samuel Theobald, M. D. (Reprinted from the *Medical News*, Feb., 4 and 18, 1882.)

The Recent Tariff Correspondence, relative to the Import Duties on Chemicals. (Press of Keasbey and Mattison, Phila.)

Infant Feeding and Infant Food. By Abraham Jacobi, M. D. (Reprinted from the *Medical News*, Feb. 18, 1882.)

News Items.

Article LXXXVI.

☞We have been forced by the pressure of matter, to omit several articles, among which is an interesting communication on Ethics, by Dr. E. Montgomery.

Dr. Grass says, never open a gumma, no matter how soft, you will only make a fistulous opening which is difficult to heal; endeavor to obtain absorption with iodine, etc.

Dr. Lacerda, claims to have discovered an antidote to snake bites, in permanganate of potash, using a one per cent. solution injected under the skin. This is at variance with Drs. Taylor and Brunton, who made their experiments at an earlier period.

According to Meisoner, of Leipsic, mosquitoes carry parasites from one human being to another, through blood sucking.

Aretæus, of Cappadocia, is credited with the first description of diphtheria. He lived A. D. 100. The first known epidemic of this disease was in Holland, A. D., 1337.—[*Detroit Clinic.*

A Chicago daily tells of a speculum of bone, which was driven into a man's spinal cord by a pistol shot. A new place to introduce a speculum; but the manner of introduction is scarcely more severe then the way in which some physicians use the other kind of speculum.—[*Peoria Med. Monthly.*

Pasteur has been was one of the Forty Immortals of the French Academy. Napoleon III, tried in vain to obtain this honor.

Sir Erasmus Wilson, President of the R. C. S., has given $50,000 to the University of Aberdeen, to found a chair of Pathological Anatomy.

A statue is to be erected to Claude Bernard, by the Municipal council of Villefranche, (Rhone) in the place which now bears his name, all honor to this great physiologist.

Dr. Martin (*Med. Times and Gazette*) uses fresh parsley

leaves for the flow of milk. They should be renewed several times a day.

A CASE of fatal poisoning by 800 grains of bromide of potash is reported by Dr. Christian Fenger. A patient in Cook County Hospital, Chicago, took the above amount of bromide of potash. His pulse was 64, respiration 20, temerature 98.1°. Stupor for twenty-eight and one-half hours, and death.

DR. WEST, formerly regarded as the great opponent of the identity of croup and diphtheria, now declares his conversion to the opposite view. Membranous disease is one and the same, sometimes local and sometimes septic.—[*Detroit Lancet.*

AN exchange says that an Idianapolis judge has decided that "a druggist may sell cigars on Sunday, but not a cigar dealer." And it is a wise decision, too. A druggist should not be permitted to sell a cigar dealer on Sunday or any other day.—[*The Druggist.*

DR. REUBEN A. VANCE, of Cincinnati, having accepted the chair of Operative and Clinical Surgery, in the Medical Department of Wooster University, has removed to Cleveland.

THE Cook County Hospital, Chicago, is to be placed in part under the professional control of Homeœpaths, and the other part under the care of the regular medical management.

The late Dr. Edward L. Beadle has left, by legacy, the sum of $ 5,000 to the New York Academy of Medicine and Dr. Homer Bostwick has donated his valuable library, consisting of about 250 volumes to the same society.

The S E. Mo. Medical Association will hold its eleventh semi-annual meeting at Marble Hill Mo, commencing Tuesday May 2nd, at 9 A. M. The President of this thriving society is Dr. J. W. Cannon.

Professor Freund, of Strasbourg, is reported to have been offered and to have accepted the chair of Obstetrics at Breslau, formerly occupied by the late Professor Spiegelberg.

ALBRECHT VON GRAEFE.—A memorial statue of this illustrious Ophthalmologist has been erected in Berlin. It will be unveiled on the 22nd May, his birthday.

DR. WM. A. BYRD, Secretary of the Surgical Section, at the coming meeting of the American Medical Association, will deliver the address, the subject being, "Partial Exsections of the Alimen-

tary Canal." The section promises to be unusually interesting this year, a number of gentlemen having signified their intention to read papers.

GEORGE S. DAVIS, of Detroit, asks the medical profession to wait for his edition of "Lewin on Drugs," as his is the only translation authorized by the writer of the work. He claims that the translation lately issued in the East, is of a former edition of the German work, and that his will be a translation of the new German edition, before it is given from the press in the original tongue.

THE American Medical Association will hold its regular Annual Meeting, for 1882, at St. Paul Minn., commencing June 6. This promises to be unusually intesesting, from the fact the question of altering the code of ethics will be directly or indirectly brought up, and the status of the Association, on this, will be emphatically declared.

CÆSAREAN SECTION IN A COW.—Dr. Wm. A. Jackman sends us the following account of the operation:

The cow belonged to Mr. J.—— and was unable to give birth to the calf, which afterwards proved to be a very large one. The cow died, and a few minutes after Mr. J. discovered the calf was alive, and it occurred to him that the calf might be saved. The operation was performed with a pocket knife, the calf saved and is now doing well; I have seen it myself. The most singular point in the case is that it should have been done by a *farmer* with a pocket-knife, who perhaps had never heard of such a thing before, at least says he never did in the human race.

It is proposed to establish in Baltimore (in the western section of the city) a charity hospital for the treatment of diseases of the eye, ear and throat, to be known as the "Baltimore Eye, Ear and Throat Charity Hospital," and to be under the superintendency of Drs. Russel Murdoch, S. L. Frank, I. Bermann, Samuel Theobald, Samuel Johnston, J. H. Hartman, and J. N. Mackenzie—the eye and ear department to be conducted by the four first named; the throat department by the three last named physicians.

The *objects* of the charity will be to provide skillful medical surgical treatment, and, in such cases as require it, hospital accommodation for the indigent poor suffering with eye, ear and throat diseases.—[*Obstetric Gazette.*

THE CHAIR OF PATHOLOGY, UNIVERSITY OF VIENNA.—Hans Kundrat, Professor of pathology in Gratz, has been elected, within the last few days, to the chair of pathology, K. K., University of Vienna, made vacant, nine months since, by the death

of Prof. Heschl. It will be remembered that this chair was first raised into prominence by the great labors of Rokitansky. Since Heschl's death, Prof. Chiari has lectured upon pathology. That the chair, formerly occupied by so great a master as Rokitansky, should be awarded to a man known to the world by no important original researches, and possessed of no special talent as teacher or lecturer, causes a great amount of secret discontent in Viennese medical circles. It is rare, however, that such discontent finds audible expression, as the University of Vienna is truly a "Royal and Imperial" institution (Königliche und Kaiserliche). It appears that Prof. Kundrat's father is a valet to the emperor, and that through his influence, Arnold, of Heidelberg, the choice of the Faculty of Medicine was rejected.—[*Med. News.*

RESIGNATION OF PROF. GROSS.—On the 27th ult., Prof. Samuel D. Gross tendered to the Trustees of the Jefferson Medical College his resignation of professorship of surgery which he has held for twenty-six years.

Dr. Gross is seventy-seven years of age, and, although still in the enjoyment of vigorous health, recognizes the wisdom of lightening his labors with advancing years. Dr. Gross's world-wide reputation as a surgeon, and popularity as lecture, have justly attracted large numbers of students to the Jeffersor school, and his resignation is a serious loss to the Faculty and to medical education in Philadelphia.—[*Medical News.*

ATTEMPT TO SHOOT AN ASYLUM SUPERINTENDENT.—On the afternoon of the 16th ult., an insane man stepped into the doorway of the private office of Dr. John P. Gray, of the State Lunatic Asylum. and fired at him. Chaplain Gibson, Dr. Blumer, and John Gray, son of Dr. Gray, were present at the time. The bullet (38 calibre) entered Dr. Gray's face just six-eighths of an inch below the outer angle of the left eye, passed five and three-eighths inches through the face, back of the nose and out through the right cheek, two and one-eighth inches below the outer angle of the right eye and one inch back of a vertical line drawn from that point and from thence into the window-casing, about five feet from where the doctor sat. Dr. Gray was able to walk to his room and bathe his face. No shock followed. The assailant gave himself up. He was not an inmate of the asylum, but had been employed at the Turkish-bath rooms in the city. For the last eighteen months he has labored under the delusion that he was an embassador sent from heaven to shoot Dr. Gray. After the shooting he went home and told his friends that he had shot Dr. Gray and he would give himself up. He went to the jail and unloaded a perfect arsenal. He was afterwards taken to the station-house, and said he had had a duty to perform and had done it. We are glad to learn

that Dr. Gray is doing well, with every prospect of ultimate recovery.—[*Medica Record.*

The following resolutions were adopted by the St. Louis Medical Society April 1st, 1882.

Resolved: That the St. Louis Medical Society, while it desires to accord the broadest freedom to medical investigation and recognizes fully the right of individuals to form and hold private opinions, hereby declares that it regards with disfavor any steps taken to lessen or obliterate the distinctions and safeguards between an honorable practice of medicine founded upon science and that founded upon any of the current delusions and exclusive medical systems of the day.

Resolved: That a copy of this resolution be forwarded by the Corresponding Secretary to the New York State Medical Society, to the Permanent Secretary of the American Medical Association and to several specified Medical Journals.

WM. DICKINSON, M. D., *President.*
A. H. OHMANN-DUMESNIL, M. D., *Recording Secretary.*

A SIMPLE MEANS OF DETECTING TRICHINÆ.—According to John Phin, the parts of an animal that should first be examined, are the diaphragm, tenderloin, and muscles about the head and throat. In a ham, the most likely place is where the muscle ends in a tendon. Cut off a thin slice with a very sharp knife, or with a pair of scissors curved on the flat. This thin section should be soaked for some minutes in acetic acid, spread out on a thin piece of glass, and covered with another similar piece. These two slips are then pressed together. A compressorium, by means of which the plates of glass are forced together by a lever and screw, answers admirably. But better still he finds the trichinoscope, which is a compressorium holding the two glass slips, but fitted with a simple microscope on a sliding frame, which permits the examination of the specimen in each part.

His plan is as follows: a thin piece of flesh, moistened with a mixture of equal parts of acetic acid and glycerine, is placed on the lower plate and spread by means of needles fixed in wooden handles. The upper plate is then brought down on the lower one, and the screw is turned into the slot in which it fits. By turning the nut, any degree of pressure may be brought to bear on the flesh, which thus is rendered so thin and transparent, that any trichinæ present will be readily brought into view.—[*Medical Record.*

"OUR CONTINENT."—Of recent ventures in the field of general literary journalism none has attracted so much attention as 'Our Continent." It has made its appearance with little blowing of trumpets, but with an imposing array, not of the names

merely, but of the productions of the best writers in America and England. The position it takes is with illustrated weekly journals, but it does not make the reading matter subordinate and inferior to a lot of wood cuts and process engravings. On the contrary, it uses engravings to develop and increase the interest in the reading matter. While in the first instance literary, and hence well supplied with poetry and stories, it is eminently attractive to the family circle by its admirable departments devoted to house-keeping, social customs, dress, home horticulture, etc., etc. Popular science is also well cared for, and aricles on history, biography, etc., are prominent features. Its price is $4.00 a year, and as a family paper it has no superior in our language. For specimen copies, which are mailed free, address "Our Continent, Chestnut and Eleventh streets, Philadelphia."—[*Med. and Surg. Reporter.*

WE wish to add to the above, what the native modesty of the Editor of the Reporter withholds. Dr. D. G. Brunton is Secretary of *Our Continent* Publishing Co. and has materially assisted in making it the success that it is. Besides he is a most active contributor to the periodical and we know not which to admire most, his short talks on pottery, amulets etc., or his charming tales of Quaker life. We congratulate the Doctor on his new departure.

PRIZES OF THE GENEVA RED CROSS SOCIETY.—The International Committee of the Red Cross, in Geneva, offers three prizes, each of the value of 2000 francs (£80), for the best essays in (1) improvisation of means of treating the wounded; (2) improvisation of means of transport; (3) improvisation of an ambulance or field-hospital. The essays which must not have been previously published may be written in French, German, or English. The successful essays will become the property of the Society, which reserves the right of publishing them either in the original or in translation. Essays in competition may be sent up to April 1, 1883, to the President of the International Red Cross Committee, 8 Rue d'Athenée, Geneva.

THE twenty-fifth annual meeting of the Medical Association of Missouri, will be held at Hannibal, May 16, 17 and 18, 1882.

The Association will convene in Brittingham Hall, at 7:30 P. M. of the 16th, and will hold six regular session, viz: 1st, evening of 16th; 2nd, forenoon of 17th; 3rd, afternoon of 17th; 4th, forenoon of 18th; 5th, afternoon of 18th; 6th, evening of 18th. Delegates coming from the North and East, will arrive in Hannibal at 10:30 and 11:30 A. M.; those from the South and West, at 11:00 A. M. and 3:00 and 4:30 P. M.

The hotels of the city will make liberal reductions to delegates. Delegates will be met at the Union Depot by the Com-

mittee of Reception. A Banquet will be given by the citizens to the members of th e Association on the evening of the 17th.

A full attendance from all sections of the State is earnestly solicited.

On presentation to the Ticket Agent at the Union Depot of the proper certificate that will be furnished by the Secretary of the Committee of Arrangements, all delegates that have paid *full fare* over the following railroads, viz.: Hannibal & St. Joseph; Missouri Pacific; Wabash, St. Louis and Pacific; St. Louis, Keokuk & Northwestern; St. Louis, Hannibal & Keokuk; Chicago, Burlington & Quincy, will be returned over the same road at *one-third* (⅓) full fare.

As far as possible, all members of the profession expecting to be present will please notify the Committee of Arrangements by postal card.

Address all communications to J. C. HEARNE, Hannibal, Mo., Secretary of Committee of Arrangements.

THE St. Louis & St. Paul Packet Co. will make a rate of $5.00 from St. Louis to Hannibal and return, for delegates and their families. The steamers leave St. Louis daily at 4 o'clock P. M., and arrive in Hannibal next morning from 6 to 7 A. M. They leave Hannibal daily at 10 P. M., and and arrive in St. Louis next morning. The rate of $5.00 includes meals and state-room on the boat.

WE HAVE BEEN requested by the secretary of the Jasper County Medical Society to publish the following:

At a meeting of the Jasper County Medical Society held in Carthage on Tuesday April 4th 1882, the following Preamble and Resolution was unanimously passed.

WHEREAS, The Jasper County Medical Society having been creditably informed that a so-called Joplin College of Physicians and Surgeons has been issuing Diplomas to various persons without a proper course of practical anatomy, and varying from the established rules of reputable colleges as to bring discredit and ridicule upon the good standing of the profession generally, and,

WHEREAS, We are also creditably informed that the said institution above mentioned has no legal existence and its graduates are liable to indictment for practicing medicine contrary to law in Missouri. Therefore be it,

Resolved, By the Jasper County Medical Society in regular convention assembled: That we will not fraternize with any of the professors or graduates of this so-called Joplin College of Physicians and Surgeons, until they have complied with the rules of *regular* Medical Colleges in good standing.

AUG. RHOADS, SECY.

METEOROLOGICAL OBSERVATIONS.

By A. WISLIZENUS, M. D.

The following observations of daily temperature in St. Louis are made with a MAXIMUM and MINIMUM thermometer (of Green, N. Y.). The daily minimum occurs generally in night, the maximum at p. m. The monthly mean of the daily minima and maxima added and divided by two, gives quite a reliable mean of the monthly temperature.

THERMOMETER, FAHRENHEIT—MAR., 1882.

Day of Month.	Minimum.	Maximum.	Day of Month	Minimum.	Maximum.
1	41.5	63.0	18	58.0	76.5
2	48.5	72 0	19	47.0	57 0
3	52.0	69.0	20	51.5	68.5
4	51.0	75.0	21	35.0	47.5
5	46.0	54.0	22	26.5	45.0
6	32.5	43.0	23	35.5	69.0
7	31.0	39.0	24	0.0	40.0
8	34.0	44:0	25	4.0	66.0
9	39.0	46.5	26	1.0	57.0
10	34.0	37.0	27	5.0	49.0
11	30.0	48.0	28	36.0	57.0
12	30.0	41.5	29	48.5	78.5
13	31.0	44.0	30	39.0	53.0
14	33.5	50.5	31	39.0	67.0
15	47.0	65.5			
16	39.5	50.5	Means	39.7	56.8
17	43.0	65.0	Monthly Mean.	48 2	

Quantity of rain, 2.91 inches.

MORTALITY REPORT.---CITY OF ST. LOUIS.

FROM MARCH 1, 1882, TO APRIL 1, 1882, INCLUSIVE.

Small Pox 4	Childbirth 0	Convulsions & Trismus Neonatorum 30	Syphilis 0
Scarlatina 91	Inanition, Want of Breast Milk, etc. 7	Hydrocephalus and Tub. Meningitis. 5	Apoplexy 11
Pyæmia & Septicæ 3	Alcoholism 2	Meningitis & Encephalitis 18	Dis. fem. gen. org. 3
Erysipelas 2	Rheumat'm & Gout 0	Other Diseases of the Brain and Nervous System 23	Surgical Operation 1
Diphtheria 9	Cancer and Malignant Tumor 9	Cirrhosis of Liver and Hepatitis 10	Deaths by Suicide 11
Membran's Croup. 1	Phthisis & Tuberculosis, Pulmon 73	Enteritis, Gastro-Enteritis, Peritonit, and Gastritis' 15	Deaths by Accid'ts 20
Whooping Cough. 0	Bronchitis 23	Bright's Disease and Nephritis 7	Deaths by Homicid 2
Ovarian tumor 0	Senility 30	Other Diseases of Urin ary Organs. 1	Congen Defor'ty 24
Measles 1	Pneumonia 56	Diabetes 0	Total Deaths from all Causes 545
Typhoid Fever 10	Heart Diseases 24		Total Zymotic Diseases 113
Cerebro Spinal Fev 2	Other Diseases of Respir'y Organs 17		Total Constitutional Diseases 105
Remittent, Intermittent, Typho-Malarial, Congestive & Simple Contin'd Fevers, 10	Skin Disease 0		Total Local Diseases 235
Puerperal Fevers. 15	Marasmus—Tabes Mesenterica and Scrofula 13		Total Develop'tal Diseases 57
Diarrhœal Disea's 23	Other Const. Dis. 5		Deaths by Viol'ce 4
Other Zymotic Diseases 3			Unknown 1

CHAS. W. FRANCIS, *Health Commissioner.*

VOL. XLII. JUNE, 1882. No. 6

Original Contributions.

ARTICLE LXXXVII.

FIBROIDS OF THE UTERUS.* By N. M. BASKETT, M. D., of Moberly, Mo.

[CONCLUDED.]

All writers I have consulted on diseases of women, speak particularly of this great difficulty of diagnosing between ovarian tumors and cysts, and fibroids of the uterus. The quotations already given from Ashwell and Hodge, I here supplement with the following from West, Thomas and Schroeder:

West says, "The distinction between fibrous tumors of the uterus and tumor of the ovary, is far from being as easy as might beforehand be supposed, especially when the tumor grows from the posterior uterine wall. The fact that fibrous tumors are seldom developed at as early an age as tumors of the ovary; that they are seldom solitary, and that they are usually accompanied by menorrhagia, are always worth bearing in mind, though far from being conclusive in any doubtful case. Besides their surface is often uneven or nodulated. They present a greater degree of hardness than an ovarian cyst, though it must not be forgotten that when small and tense, the cyst may yield no distinct evidence of fluctuation, while a large and rapidly growing fibrous tumor may *when felt through the abdomimal walls, present a sense of elasticity which gives it a most deceptive resemblance to an ovarian cyst.* I know of one instance in which this resemblance betrayed two very experienced surgeons into an operation for the removal of a supposed ovarian cyst, but who discovered the tumor was a large fibrous growth of the outer surface of the uterus. The opposite error I have seen both committed and fallen into myself, in cases where a small thin-walled ovarian cyst was still lying in the pelvic cavity."

Upon the same subject Thomas says, "The statement, that there are many difficulties attending the differentiation of uterine fibroid from ovarian cysts, would be to leave on the mind of the practitioner, a very imperfect and erroneous impression. It is

* Read before the Moberly District Medical Association.

not only difficult but often impossible, even for the most capable and accomplished diagnostician to arrive at a certain conclusion Quite a number of cases are now on record, where experienced operators have not only acted under an erroneous impression as to the nature of the tumor, but absolutely removed the growth and the uterus from which it grew before a diagnosis was made."

I quote Thomas' table giving diagnostics between fibroid and ovarian cyst.

Uterine Fibroids.	Ovarian cysts.
1. There is usually menorrhagia.	Menorrhagia does not exist as a symptom.
2. The uterus measured by the sound is enlarged.	Uterus is not enlarged.
3. Mass felt per vaginam is irregular and continuous with the uterus.	Mass per vaginam is solid and not continuous with uterus.
4. There is generally leucorrhea.	There is no leucorrhea.
5. Sound placed in uterus and made to move the womb, the tumor felt by hand on abdomen moves also.	The uterus may be moved without the tumor moving.
6. Uterus is generally displaced.	The uterus is not markedly displaced, though it may be somewhat so.
7. There are often several tumors.	There is generally one tumor.
8. Tumor always hard.	The tumor is of fluid type (fluctuates).

These are the means by which diagnosis of these tumors can be made. Further on Thomas says, "Let it not be supposed that the task is always an easy or practicable one, There are certain forms of cancer, the medullary for example, which yield to all appearances the character of fluidity and yet contain solid elements. This the case even with cystic sarcoma." He cites a case of Dr. Peaslee's, who operated for ovarian cyst and found cystic sarcoma. Another operated on by Dr. John O'Reilly, with same diagnosis and same result; and another case of his own diagnosed by himself, Drs. Peaslee, Loomis and Budd, as ovarian and from which he removed a sarcoma weighing fourteen pounds. To quote his words, which so completely describe our own case, "As it lay upon the table after the operation, it was examined by a number of physicians, and nothing could convince them even then, that its contents were not fluid except section of the mass."

I might quote largely from Ziemssen, to the same end, but content myself with the following: "It may therefore prove

impossible to determine the diagnosis between an ovarian tumor held fast to the uterus and a subserous fibroid with a narrow pedicle or a large fibro-cystic tumor." Here then were the causes which led us into error. There was no menorrhagia, save the recurrence of menstruation every twenty-four or five days, which may occur in any woman. There was but slight perceptible enlargement of the womb. The mass was regular and imparted to the touch a sense of fluctuation. There was no leucorrhea. Moving the uterus did not affect the tumor, and there was no marked displacement of the womb. There was only one tumor. The only feature lacking in my examination was that I did not employ a sound. Whether any gentleman who previously examined her, used one, I cannot say.

Five methods are mentioned by the authors, in which nature attemps a spontaneous cure. 1. Absorption. 2. Atrophy, the pedicle gives way and the tumor is thrown off. 3. Sloughing or inflammation, from want of nutrition. 4. Calcareous degeneration. Only two of these methods apply to the subperitoneal tumor—absorption and calcareous degeneration. These will rarely occur.

The treatment of these tumors varies with the individual author. Ashwell, who calls these tumors malignant, claimed to have cured some cases with iodine. Hodge thought his pessary the best thing in the world, though also recommending iodine, and other alteratives. West speaks of the rare "accident of recovery, and mentions iodine, bromine and Kreuznach waters. He thinks bromide of potassium has the advantage of being better tolerated, and for a longer time, than the salts of iodine. He thinks that so far as a specific is concerned, that none exists, or at least has at present been discovered.

Thomas has his doubts of absorption having ever occurred through the use or as a result of medicine.

For the sabperitoneal tumors but one means of surgical interference exists, viz.: gastrotomy. Ashwell does not mention the operation at all. Hodge merely refers to it, and that to condemn mentioning the successful case of Dr. Allen, of Philadelphia. West says: "A few cases are on record where the abdomen has been laid open and the extirpation of fibrous tumor from the outer surface of the uterus, has been attempted and actually accomplished. In most of these cases the operation was undertaken with the impression that the tumor was ovarian;

and in all instances but one its completion was followed by the patient's death. It is a proceeding to be altogether deprecated, difficult to accomplish, almost certainly fatal if concluded, surrounded by dangers which wisdom cannot foresee nor skill avert."

On the other hand, Thomas, while admitting that the mass of the profession are against the operation, thinks, "it no more so than it was twenty years ago with reference to ovariotomy. The operation is truly a formidable one, and yet since it has been repeatedly successful, in cases susceptible of no other means of relief, it is worthy of consideration. Indeed, should the steady decadence of the patient's strength make it certain that a fatal issue must soon ensue, the operation in case of a pedunculated subperitoneal tumor would become a matter of duty and not remain one of choice." "It is not venturing too much even now, to say, that if the fibroid be pedunculated and unattached, its removal is no more dangerous than the ordinary operation of ovariotomy." He gives Prof. Stone's table showing twenty-four operations and six recoveries, or 25 per cent. A subsequent table gives ten operations and ten deaths.

Schroeder gives the following: 108 laparotomies for uterine fibroids there were 78 deaths and 30 recoveries. 73 operations with removal of the uterus, gave 55 deaths and 18 recoveries. While 35 operations without removal of the uterus, gave 23 deaths and 12 recoveries.

"According to these results," says he, "we must agree with Boinet, that in case of non-pedunculated tumors, at all events, we should only undertake an amputation, if very urgently indicated." Pean, however, even under these circumstances, reports eight cases and six recoveries.

Notwithstanding the array of authorities, it is evident from the tone of recent discussion in medical societies, and cases reported by individual physicians all over America and Europe, that operations for fibroid are becoming more popular every year, and it is probable that with improved therapeutic and hygienic measures, the day will come that the operation, in a certain class of cases, will be as popular as the operation for ovarian tumor.

MODES OF DEATH AFTER OPERATION.—Death may result after this operation, in several ways; viz.:

Primary and secondary shock or collapse; hemorrhage; peri-

tonitis and septicemia; (Thomas) for primary shock nothing is better than profound anæsthesia during the operation, with hypodermic injections, or per rectum with brandy.

To prevent collapse the whole armamentarium of the materia medica may sometimes be found inadequate. Morphia, quinia, brandy, ammonia, camphor, *et id genus omne* will be useful though frequently unsuccessful.

The usual means employed to control hemorrhage, both primary and secondary, can be used here with success. Digital pressure, clamps, cauteries, ligatures, styptics and other means according to indication.

Peritonitis is to be treated on the same general plan laid down in works for the subjugation of this disease. It is a fearful complication, statistics showing that 40 per cent. of deaths following gastrotomy, result from this cause. The same may be said of septicemia, the surgeon being expected to meet such conditions as may arise to the best of his ability. It is necessary that these troubles be studied in detail and they cannot come in the scope of this paper which is already so extended.

In conclusion, I will say, that this paper is not written as an apology for any error in diagnosis. As I have shown, the best medical minds have made the same. Possibly had our diagnosis been correct, the operation would not have been performed. It is written, however, to inculcate the lesson which the writer has learned, that we may all, as practitioners, be more guarded in our diagnosis; and that careful conservative utterance may take the place of dogmatic decisions, particularly when we enter the abdominal and pelvic regions, to decide upon the afflictions which affect the children of humanity.

Article LXXXVIII.

Ligation of Common Carotid Artery for the Prevention of Hæmorrhage, Caused by Gangrene of Cheek and Neck Starting from a Carious Tooth. By William A. Byrd, M. D., of Quincy, Illinois.

The evening of January 27th, 1882, Dr. M. Rooney called, and requested that I should accompany him the next morning to see Joseph Valentine, a boy between seven and eight years of age that was suffering from gangrene of the left side of the face and neck, accompanied with severe hæmorrhage. Early the next morning, January 28th, we called and found the child very anæmic with the left side of the face swollen, with an opening, that would admit the point of a finger, opposite the submaxillary gland, another in the meatus auditorius and another in the mouth opposite to the outside of the first molar tooth; from all these openings was flowing a dark, very offensive fluid mixed with arterial blood, and, also, shreds of gangrenous connective tissue protruded from them. For some weeks the child had suffered from an offensive discharge from the left ear; and about two weeks before we saw him the first left molar tooth commenced aching and the jaw to swell. This continued until a few days before we saw him, when a black spot appeared opposite the tooth. The skin gave way at the spot, giving vent to a dark, very offensively smelling discharge. At the same time, the swelling having extended up to the ear, or rather the swelling from the ear and the tooth having coalesced, and the abscess, broke into the ear and mouth, causing a profuse dis-discharge from each opening. In a day or two blood was discharged from all three openings and on the 27th. there being a great deal of it, Dr. Rooney, was sent for. He seeing it was arterial applied styptics and compresses with the administration of stimulants and tonics, it being dark, called upon me to see the patient with him when daylight would permit us to search for, and if possible, secure the bleeding vessels. Putting the patient under the influence of ether it was discovered that the bleeding

came from so many points that it would be impracticable to secure all of them without too great a loss of blood and shock to the patient. Although it was evident that only branches from the external carotid were eroded, still the gangrenous process seemed so malignant as to threaten the larger vessels, so we decided to ligate the common carotid. This was done with cat-gut after the usual method. Through the incisions a great quantity of gangrenous material was removed as high as above the zygoma and down nearly to the clavicle and around to at least an inch to the right of the mental symphisis. The cavity was carefully washed out with a solution of boracic acid and packed with oakum soaked in eucalyptol and vaseline. In the afternoon he was much brighter and so continued until the afternoon of the 29th when he commenced sinking and died the next morning. There was no more hæmorrhage after the operation, his appetite increased, his pulse became fuller for a time, and the gangrenous process was arrested, but the system was too thoroughly saturated with the septic material that had been absorbed. In Dr. Rooney's opinion, the origin of the trouble was the otorrhea which had weakened and poisoned him, besides interfering with proper inervation by the inflammation or irritation extending from the ear to the brain. That it was to some, or even a great extent the cause I am willing to admit, but the proximate cause was the diseased tooth, for around it was the greatest destruction of tissue. I have every reason to believe the result would have been different had the family called a physician when the first evidence of gangrene appeared or even when the hæmorrhage first made its appearance. This case teaches the danger that sometimes attends a neglected carious tooth. It has been but three or four years since another very promising young man of this city lost his life from osteo-myelitis starting from a a carious tooth.

Article LXXXIX.

NOTES ON CASES IN GENITO-URINARY SURGERY.

—Case No. IX.—

Strictures of Large Calibre—Urethrismus. Internal Urethrotomy for Ante Scrotal Strictures, and a Second Time for a Stricture at the Bulb.—Urethral Fever—Ricord's Operation for Varicocele.—Loss of the Wire-Loop within the Scrotum—Division of the Veins with the Galvano-Caustic Wire—Complete Recovery. By W. Hutson Ford, M. D., of St. Louis.

Jan. 22, 1876, Mr. E. S., aged twenty-six, a man of moderate height and spare build, had a gonorrhœa at eighteen which lasted six months. The affection recurred six or seven months ago, a gleet following which hung on for a long time. He is unmarried; exceedingly nervous and hypochondriacal. The stream of water is about an eighth of an inch in size, and there is considerable straining in micturition. He does not rise at night to pass water; there are no vesical symptoms. B. B. 29 defines contraction at one end from the meatus, whose lower fold encroaches notably on the orifice of the urethra. The entire urethra is exceedingly sensitive. There is a contraction at the bulb which is no doubt partly urethrismic. The contraction one inch down was stretched to thirty-two and divided with Otis' dilating urethrotome, the falciform lower border of the meatus being similarly divided. A somewhat sharp hæmorrhage was met by the introduction of a glass tube into the urethra, and bandaging of the penis upon this, cold water being also applied.

Internal Urethrotomy.

Jan'y 25th, B. B. 30. passed as far as the bulb. A stricture at the bulbo-membranous junction of the calibre 12 F. is detected. There is some irritability of the bladder and prostatorrhœa, and a generally atonic condition of the genital organs. There is a pronounced and at times very painful varicocele of the left side. All his trouble, he thinks, dates back to the pro-

longed gonorrhœa acquired eight years ago at college. The meatus has been successfully widened.

February 11th. By intermittent dilatation with steel sounds the perineal stricture has been expanded to a calibre of 24 F. without accident.

Otis' straight urethrotome was passed through the the stricture, screwed up to forty, and the sharp-edged knife drawn through the stricture on the floor of the urethra. Immediately after a No. 23 catheter passed into the bladder, and a No. 30 sound after that. There was not much hæmorrhage. Passed urine containing some blood at five P. M. Ordered recumbency; cold to the perineum; anodyne suppository at bed-time; meagre diet. Deep Internal Urethrotomy.

February 12th. 10 A. M. No bleeding, no pain or tenderness on pressure in the perineum. Continue.

Feb. 13th. 10 A. M. Urinated yesterday at 12:30 P. M. Half an hour afterwards, had a smart rigor lasting ten minutes, followed by high fever. This was met by quinine and veratrum gtt. ij. every two hours or oftener, with a quarter of a grain of morphine at bed-time. This morning he is already better, and passes his water easily enough. The urine is smoky from admixture with blood derived from clots in the bladder. Quinine and veratrum; recumbency. Rigor and Urethral Fever. Hæmorrhage backwards into the Bladder.

Feburary 15. The urine is clear to-day. C. S. 29 and 31 passed without much pain. Passed a full stream of urine.

February 23rd. The sound has been regularly passed. The stream of water is excellent; indeed, he may be considered as quite well again as far as the stricture and its results are concerned. He was instructed in the use of the sound, and properly informed with respect to the necessity of passing it at regular intervals for the future to prevent recontraction. Prompt recovery.

February 25th. At his request, the varicocele was operated upon to-day by a modification of Ricord's method. The veins were encircled with a strand of silver wire, whose two ends were passed through holes three-sixteenths of an inch apart in a leaden plate and twisted so as to tighten the loop encircling the veins. This wire was very easily passed by thrusting it through a hollow needle (one of Dieulafoy's aspirator needles) and returning it through Operation for Varicocele.

the same needle on the other side of the veins. The loop was tightened every day for ten days or more, but was so slow to come out that the veins were divided ultimately with a platinum wire heated by the galvanic battery. A bit of the silver wire forming a part of the loop, which had broken finally in an attempt to tighten it by twisting, was left in the wound, after the failure of all moderate efforts to recover it. The wound healed up over the little ring, which has not produced any inconvenience up to the present time so far as I have heard, (August 26, 1880) now more than four years. Some similar accidents with silver wire are detailed in the London *Lancet* (Am. Reprint) for May, 1877. One of these happened to Dr. J. C. Ogilvie Will in consultation with Professor Pirrie and Dr. Ogston, another to Mr. Redfern Davies, and a third to Mr. Barnard Holt. In all these cases like my own, the irrecoverable loop was allowed to main. In none of the cases were any after-troubles noted. So well satisfied was Mr. Holt, with the result of leaving the wire loop imbedded in the tissues, after the failure of all gentle and informal, or even justifiable means of recovering it, that according to Dr. Will, "he considered it was a practice that might be repeated with advantage.' With this opinion I am induced to concur, *provided no other mode of action is left to our choice.* My own patient is not aware up to this time that the bit of wire remains imbedded in the scrotum. During the section of the veins with the galvano-caustic wire, several phleboliths escaped. Others were felt in the enlarged veins at the base of the scrotum. The operation for the varicocele was entirely successful, and within a few months the patient married.

Division of the veins by the Galvano-Caustic wire.

Loss of a wire loop.

Phleboliths.

Translations.

Article XC.

FROM THE FRENCH.

EXCERPTS FROM LATE FRENCH JOURNALS. [Translated for the JOURNAL.] By A. H. OHMANN-DUMESNIL, A. M., M. D., of St. Louis.

INTRA-CRANIAL CIRCULATION DURING THE HEART'S INACTIVITY.—M. Franck has detailed to the Société de Biologie, an experiment which completely ruins the classic theory of Richet on the role of the cerebro-spinal fluid in cerebral anæmia dependant upon a stoppage of the heart. It is generally admitted that the liquid of Cotugno oscillates from the cranial to the spinal cavity, and inversely, with each cordiac revolution, thus filling the void produced in the skull during the heart's diastole and returning to the spine at the moment that the arterioles of the cerebral pulp are filled. Franck places an elastic ligature about the meninges of the superior part of the cord, and the heart being stopped, he finds by the aid of an opening in the skull, that instead of a retraction of the brain there is a tumefaction with intense congestion of the veins, and considerable blood-pressure. It follows that arterial anæmia is accompanied by nervous congestion; the void produced in the cerebral pulp by the diminution of calibre of the arterioles is compensated for by the repletion of the veins and not by an afflux of cerebro-spinal fluid.—[*Progrès Médical.*

NASO-PHARYNGEAL POLYPI AND THEIR PROPAGATION TO THE BRAIN.—Dr. N. A. Petit arrives at the following conclusions, from the cases he has observed:

1. Naso-pharyngeal polypi have a marked tendency to invade the skull cavity.

2. The diagnosis of penetration does not rest upon any certain sign.

3. Certain tumors in the neighborhood of the base of the

skull may have led to a supposition of perforation of the base, when there was nothing.

4. When it is feared that the skull cavity is invaded, all operative interference is interdicted until some important function is impaired, such as respiration and nutrition.

5. When an operation is deemed necessary, palliative treatment is to be employed, and only those parts of the tumor removed, which are the ones that interfere.—[*Revue Mens. de Lar. d'Otol. et de Rhinol.*

INSANITY IN A CHILD.—It is rare for insanity to manifest itself in early childhood. Born with extraordinary conditions of heredity, the child, suckled by its mother, was at the age of three, very impressionable, subject to violent fits of anger, striking its head against the walls. At the age of four it presented the characteristics of true insanity with melancholia and suicidal tendencies. There were hallucinations of sight, hearing and taste. The child is small, lean and little developed. It calmly describes the hallucinations under which it suffers, all the visions seen, and whose object is always to make the child kill itself. It cannot help crying because it has so many worries which it cannot explain, these troubles giving rise to a desire to commit suicide.

M. Magnan regards such precocious and complete insanity as remarkable, and attributes its completeness to heredity.—[*Jour. de Méd. et de Chirurg. Prat.*

DIABETIC ENDOCARDITIS.—Dr. Lecorché thus summarizes on this affection:

Diabetic endocarditis, which we have observed several times, shows itself more often in females than in males, (eight to six). We have only met with it in its chronic state, and only in cases of subacute or chronic diabetes. It only appears at an advanced stage of this disease, two, three and even more years after its inception. It is less the intensity of the glycosuria than its long duration which seems to help its appearance.

It is localized at the mitral orifice. We have only once seen it at the aortic orifice.

It shows its presence by a *bruit de souffle* during the first time and at the apex of the heart, by an irregular and intermittent pulse.

It is sometimes accompanied by atheroma of the arteries (two out of fourteen).

It precipitates the course of the diabetes and often brings on death, by provoking a more or less generalized œdema or ascites or by becoming complicated with acute hepatitis.

It seems to be due to the irritation of the endocardium produced by prolonged contact with blood altered by the presence of an excess of sugar.—[*Gazette des Hôpitaux.*

RESEARCHES ON THE BLOOD.—M. Pouchet has made new researches on the blood of the horse. It is well-known that if a solution of sulphate of magnesia be added to blood, it does not coagulate. This plasma mixed with sulphate of magnesia, is allowed to evaporate on a slide; an arborescent crystalization takes place; the sulphate of magnesia is dissolved by means of water, and there remains upon the slide the products of the plasma. He finds fusiform bodies, some in the form of a cross, and others grafted the one upon the other. He thinks that these are hitherto undescribed bodies which he will study still further. —[*Ibid.*

INTERCRICO-THYROID LARYNGOTOMY.—M. Krishaber formulates his conclusions as follows:

1. Intercrico-thyroid laryngotomy has over tracheotomy the advantage of an extreme facility of execution, on account of its two fixed guiding points, the thyroid and cricoid cartilages, and on account of the superficial position of the crico-thyroid membrane.

2. Vertical puncture of this membrane is sufficient, the integument being cut only to a short extent, to penetrate into the space with a canula *ad hoc.*

3. The operation may be performed with a bistouri or thermo-cautery. The latter is safer in regard to hæmorrhage and the penetration of blood into the air passages.

4. The thermo-cautory must be used at a dull-red heat.

5. The division of tissues, when the igneous method is used, must be effected by successive punctures and not by the linear method, in order to avoid radiating forms of eschars, which might induce secondary hemorrhages at their separation.

6. A canula with a beak dispenses with a dilator, whose employment would be well-nigh impossible in the crico-thyroid space. Thus the only point of danger of opening into the air passages is averted.

7. The indefinite sojourn of a canula in the crico-thyroid space does not alter the voice and produces no lesion of the cartilages of the larynx.—[*Ibid.*

Article XCI.

FROM THE ITALIAN.

Charcot on Spinal Localizations. (Paris 1878-1880.) Review by the Milan Hospital Gazette. [Translated for the Journal.] From *Il Pisani, Sicilian Gazette.* By Joseph Workman, M. D., Toronto, Canada.

This is the second part of the lectures given before the Faculty of Medicine of Paris by the great French clinician, on the localizations of diseases of the brain and spinal cord.

Though there yet are a considerable number of pathological states which evidently reside in the nervous system, but leave not in the body any appreciable material trace, or reveal themselves by only trivial lesions, with determinate character insufficient to account for the principal facts of the morbid drama (as true epilepsy, paralysis agitans, hysteria, even the most inveterate, chorea): yet, in the course of the last few years, the pathology of the nervous system has made valuable progress due for the most part to anatomo-pathologic research, which has been rendered more penetrating by the use of the perfected means of modern histology so that, as concerns the diseases of the nervous system it may with reason be said that the advances of pathology proceed hand in hand with those of pathological anatomy. Thus, for example, the affections called locomotor-ataxia (Duchenne) and the multilocular induration of the nervous centers or sclerosis in patches, were not known in their classic type unless when they were related to some respective cerebrol-spinal lesion. The regular type is rare; the abnormal forms are, on the contrary, frequent and numerous; they may be conjoined to a type from which they are clinically far apart, solely by means of pathological anatomy giving the leading clue.

But besides the purely practical scope, the study of lesions may to-day, with the concurrence of experimental data, furnish the basis of a rational physiological interpretation of morbid

phenomena, a scientific object not the least important among those prepared by the author of these lectures.

Whilst normal anatomy and experimental physiology have been able to distinguish in the medulla spinalis, only, 1st an axis of gray substance divided into anterior cornua, with cells called motor, and the roots of the anterior nerves, and into posterior cornua, where the roots of the posterior spinal nerves enter; 2nd a medullary mantle formed of nervous fibres, almost every where of longitudinal direction; it is divided into antero-lateral fasciculi, which are bounded by the anterior sulcus and the collateral posterior, and into posterior fasciculi which are bounded by the commissure and the posterior horns; methodical study of the pathological lesions has shown that the constitution of the spinal cord is really very complex.

There are lesions called systemic (Vulpian), which reside and are circumscribed, in certain regions, well determined, of the organ with interesting neighbouring regions. By means of these it has been possible to distinguish in the posterior fasciculi a part near the posterior sulcus, (the cords of Goll), from another nearer to the posterior cornua (the radical fasciculi of Pierret or the cuneform of Burdach); in the antero-lateral fasciculi, a fasciculus of Turck, or the direct pyramidal; neighbouring the median sulcus, a pyramidal crossed fascuoli placed between the two cornua on each; and a cerebellar direct fasciculus placed between the base of the latter and the pia mater (at least in the upper half of the medulla spinalis). The region surrounding the anterior cornua (the anterior radical zone of Pierret the fundamental region of the lateral fasciculi of Hechsig) is the only one that as yet has been seen to persist in a normal state in the dissection made by disease in the antero-lateral fasciculi.

The study of the medulla spinalis of the newly-born (Pierret and Hechsig) has shown that this distinction corresponds to a true functional autonomy of these various parts. Whilst in the newly born, the rachidian bulb and the medulla spinalis are in general completely developed, their direct and crossed pyramida fasciculi are not yet so.

On transverse sections of the medulla spinalis the crossed pyramidal fasciculi are seen to diminish in diamater regularlly from above downwards, but principally in correspondence with the cervical and lumbar enlargements, whilst the direct pyramidal fasciculi can in general be followed as far as the half of the

dorsal medulla, sometimes only to the cervical region, but sometimes to the lumbar. It seems therefore, that the longitudinal fibres which compose these fasciculi are successively arrested along their course and from some data furnished by embryology they seem to be arrested in the anterior grey substance, with which they probably enter into relation with the grand motor cells.

These fasciculi are no other than the prolongation of the bulbar pyramidal (anterior pyramids) after their semi-decussation known under the name of the crossing of the pyramids. As regards this crossing, it has to be noted that it is subject, according to the observance of Hechsig, to numerous variations. The first type is the most common,and consists in the symmetrical decussation, each pyramid furnishing a fasciculus direct and another crossed. Sometimes, however, the opposite happens, and this disposal would explain the cause of direct cerebral paralyses.

(Note by translator.—What does the writer desire to be understood by the word *opposite*, as above employed? The opposite of *direct* and *crossed* must be simply *crossed* and *direct* but this cannot be the author's meaning. Perhaps it may be involved in the subsequent passages.)

The second type observed eleven times in one hundred is the total decussation in which the direct fasciculi are completely wanting. The third type, which was presented forty times in the hundred, may be called asymmetrical, only three precisely existing, that is, one pyramid only is divided into two fasciculi, one direct and the other crossed; the second pyramid, on the contrary, is totally crossed. It is important to remember this asymmetry which is continued in the medulla, in order that it may not, in certain cases, be referred to a pathological state.

In the protuberances, the continuations of the pyramidal fascicles are mixed and interwoven with the proper fibres of this part, but in the cerebral peduncles they are again united in two fascicles one on each side occupying according to Charcot the two middle quarters of the inferior plane or the foot of the peduncles. This localization also founded on pathological anatomy finds confirmation in the normal anatomy of the new born; as in this period of life the section of the inferior peduncular plane may be divided into three ligaments of almost equal dimensions, internal, external and middle, and only the

last has reached complete developement, contrary to what is verified in the medulla.

According to Hechsig the pyramidal fasciculi may be followed beyond the foot into the depth of the hemisphere, occupying the knee or the middle third of the internal capsule, and then proceeding to terminate in the region of the grey cortex designated under the name of the motor zone, or Rolandic region paracentral lobule, superior extremities of the ascending frontal and parietal convolution) where the nests of pyramidal or giant cells, resembling the motor spinal cells, are found.

This inter-hemispheral passage of the pyramidal fasciculus has been confirmed by the chromologic facts established by Parrot in the brain of a child 17 days old, in which the middle or sub-Rolandic part of the corona radians was contradistinguished by the presence of medullated fibres; the fasciculi of the centrum ovale were presented in this part under the forms of two converging white tracts in the midst of a surrounding grey consisting of nervous fibres not yet medullated.

The first class of systemic or elementary lesions of the medulla studied by Charcot, was that of the so-called secondary degenerations, or those produced consecutively to another lesion for the most part by morbid foci primitively developed in the diverse parts of the nerve axis,—the brain properly, called the bulb, the medulla spinalis or even in the peripheral nerves. These may acquire a real individuality and to them may be referred the whole clinical history which accompanied the original disease. In this relation the secondary lesions most interesting are those which affect the system of the pyramidal fasciculi. They may be divided into three groups:

1st. *Secondary degenerations from cerebral causes or descending.* The focal lesion which produces such degenerations may occupy the brain properly called or the isthmus of the encephalon. In the first case, it is necessary that the lesion be situated in the knee of the internal capsule which may be called its pyramidal region or in the Rolandic region of the cerebral cortex and thus interesting also a portion of the underlying white substance or in the Rolandic region of the oval centre, without participation by the grey cortex. In the second case, it is necessary that the focus interest the path of the pyramidal fasciculi in the pedunclcs the protuberance and the rachidian bulb. As to the nature of the original lesion it suffices that it be destructive, that is,

that it shall produce in the part in which it becomes established, a real loss of substance at the expense of the nervous elements.

As a rule, the muscles of the limbs of the paralyzed side, in subjects taken with permanent hemiplegia from a cerebral cause, present only such atrophic alterations as very tardily result from the functional inertia to which these muscles are condemned: but it may happen that the paralyzed muscles undergo, at a given time, an atrophy more or less rapid, and present modifications more or less profound in their elective reactions, ordinarily, when a secondary degeneration of the lateral cord exists the nervous motor cell with which the terminal extremity of every pyramidal fibre is in a relation not yet well determined, resists in the ratio of its autonomy, the invasion of the morbid process and protects, so to say, the corresponding anterior root But in certain exceptional cases, under the influence of unknown conditions, the cell is, in its turn, atrophied and afterwards justifying the law of Waller the corresponding roots undergo degenerative disintegration. The ultimate consequence of the system of centrifugal nerves is atrophy and degeneration of the muscles to which the affected roots are destined.

2nd. *Secondary degeneration from a spinal cause.* These are consecutive to the foundation of some focal destructive lesion interesting the white fasciculi of the medulla spinalis, and they may be descending or ascending.

The descending are quite similar to those from cerebral cause, that is, they interest the direct and crossed pyramidal fasciculi through their whole extent below the point primitively injured. If the lesion be totally tranverse, the whole four of these fasciculi are degenerate; if it be partial they are so on only one side, but also frequently, though in a less degree, on the other side. This fact would induce the belief that there exists for the crossed pyramidal fasciculus a second one in the bulb (in the anterior pyramid) the other in diverse points of the medulla scattered over the entire height of the dorsal region and thus might be explained paraplegias more or less complete and paralysis of both lower limbs which are produced sometimes in cases of unilateral spinal lesion or cerebral focal lesions.

With respect to ascending degenerations the author first draws attention to the fact that both structural and the pathological anatomy have demonstrsted the mutual independence of

the fasciculi of Burdach composing the so-called posterior cords. The ascending degenerations interest these four posterior fasciculi and the direct cerebellar lateral fasciculi of the lateral ones; as, however the fibres which compose the last named seem to originate in the highest regions of the dorsal medulla, their degeneration is not produced if the focal lesion is seated in the lower parts of the medulla, or yet lower. The degeneration of these fibres which are of great length may be identified even up to the restiform bodies, and into correspondence with the cerebellum. The nerve fibres of the fasciculi of Goll are also of long extension and their degeneration may be followed from the lowest parts of the medulla spinalis even up to the floor of the fourth ventricle. On the contrary in the fasciculus of Burdach, consisting of short commissural fibres the ascending degeneration can be followed only for a very short distance.

[TO BE CONTINUED.]

Article XCII.

FROM THE PORTUGUESE.

Study of the Etiology and Nature of Beriberi. By Dr. A. Pacifico Pereira. Translated from the *Gazeta Medica da Bahia*, for the Journal. By Joseph Workman, M. D., Toronto, Canada.

[CONTINUED.]

The hæmatology of beriberi is one of the least studied points, though it is one of the highest practical advantage for the elucidation of the nature of the pathological process of the disease.

The analysis of the richness of the blood, the alteration in its morphological elements in quantity and quality, its capacity for the exercise of the essential functions of respiration and nutrition, are important objects, whose very difficult study is presented to all pathologists who desire to understand the nature and causes of the disease.

The old analyses of Scharlée and Schneider furnish the first elements for the hæmatology of beriberi. In his excellent article, presented in the Encyclopedic Dictionary, the distinguished Dr. Le Roy of Mericourt, thus summarizes the results of those analyses:

"The blood of patients attaked by beriberi contains much water, few solid elements, an excess of sulphuric acid, soda and calcareous and magnesian phosphates; a very small quantity of phosphoric acid, potash, fibrine, globules of albumen and extractive matters."

From this succinct exposition of the result of the analyses, it is seen that they are not sufficient for the clear exhibition of the alterations presented by the blood in its physical, chemical, and physiological properties. The examination of the blood made by Wernich, in his study of the Beriberi, or *Kakke* of Japan, (Virchow's Arch. vol. 71,) adds a new contribution to this important chapter of the pathology of the disease. The results of Wernich's numerous examinations are thus described in the interesting work here referred to:

"The blood of the patients affected with *Kakke* presents, when examined during life, and compared with that of a sound person, a less vivid color, a muddy red, but it is not remarkably watery. The abstraction of a large quantity of blood from a patient, in order to carry out a chemical examination, is held to be unwarrantable, since all loss of blood in this disease is considered extremely perilous. In our analysed specimens we did not perceive viscosity or any special odor.

"On microscopic examination the number of red globules did not appear changed, nor was that of the white globules augmented. The latter, when distinctly seen, presented nothing special. Among them, however, small scattered masses were observed, composed of very fine granules, in brilliant groups, of a pale red color, rather turbid, with a circumference over double that of the white globules, though, in rare occasions, less than these.

"It was clearly seen that the majority of these masses were not composed of agglomerated white globules. The red globules in the initial periods, and in the less accentuated cases of the disease, presented no difference from those of normal blood, examined at the same time, and under the same conditions, whether as to form or relative quality.

"In all the advanced cases of the disease, the size of each of the red globules was notably less than the normal. They frequently presented, in addition, in these cases, a stellate form, or that of a hedgehog (covered with small spiculæ), and without exception they appeared deprived of the property of being united in bead rolls, though the normal blood, examined in the same temperature and with the same serum, or the same sugared solution, did not lose this property, nor did it present the spicular globules.

"As these results were presented in all the examinations of the blood so clearly that I was able to demonstrate them with certainty, I considered the diminution in size, and the loss of force of cohesion of the red globules, as signal characteristics of *Kakke*, and the appearance of stellate corpuscles, or hedgehog forms, as a very manifest indication of advanced cases of the disease. All these small corpuscles of blood, even to the trivial dimensions of granulous detritus, were as distinctly seen as the red corpuscles, which are regarded as transitional between the white and the red globules, were never met with in the cases ex-

amined, neither were any cells whatever of extraneous organisms, vegetable or animal."

Having decided to study the changes of the blood in beriberi, I proceeded from June, 1880, regularly to examine microscopically, this fluid in all the cases of the disease which might come under my observance, whether in my own clinique or in those of my colleagues. I preserved notes of the examinations made in sixty-two cases, with microscopic analyses and experiments conducted in different ways and under diverse circumstances, in order to verify not only the morphological alterations of the constituent elements of the blood, but also the presence of elements foreign to its normal constituency. I shall now give in summary the result of those studies, so as not to fatigue the attention of the reader with technical minutiæ, so well known in this sort of work, or with repetition of the history of the phenomena, which, to be well appreciated, must be of frequent observation.

In the various microscopic analyses, I employed the lenses of Nachet, de Verick, and Hartnack, which give a magnification of 600 to 1,500 diameters, the latter being of great advantage in the study of some micro-organisms in the blood, and for the study of the more profound changes of structure noticeable in the globules.

Commencing with the study of the morphological changes of the globules, we remarked that the red presented various dimensions, and the majority of them appeared reduced in size, and had taken various forms. In many advanced cases of disease we observed that this change was unquestionably accentuated, the globules being, some discoid, some ovoid, others almost spherical, and many of them presenting the hedgehog spines, even in those cases in which the blood was examined whilst yet fresh, immediately after being drawn from the finger by the point of a needle. We studied with great care the alteration mentioned by Wernich, which I compared with the form of the spiculous globules, and I considered it a manifest indication of the advanced cases; the smallness of the globules and their cohesive defect, which causes them to lose their property of aggregation in bead rolls, I regarded as signal characteristics of the blood of *Kakke*.

The alterations mentioned by Wernich have not so absolute a character, nor are they so pathognomonic of the disease, but

they certainly are very noticeable in a majority of the cases. The phenomenon of shringking up of the globules, always observed when on the field of the microscope the serum of the blood commenced to dry off, and the protoplasm of the globules was altered by the perturbation of the osmotic currents which sustain the equilibrium of assimilation and dissimilation, an alteration which is here manifested by the wrinkling of the protoplasm, giving to the globules the appearance noted by Wernich, takes place very rapidly, and on a larger scale, in the blood of beriberics, than in normal blood.

Proceedings of Medical Societies.

Article XCIII.

ST. LOUIS MEDICAL SOCIETY.

Taken by the Journal's Stenographic Reporter.

Saturday March 18th, 1882.

Cases of Eye Affections.

Dr. Rosenthal.—I have been unable to prepare an essay, but I have some cases that are of interest which I will exhibit to the society and explain their nature.

Case I. This gentleman was injured by a fall on the 20th. of last January. He was pushed from the platform of a street car. He fell on his face and the ground being frozen, the fall produced quite an extensive wound. There is one cut extending from a little below the orbital process of the frontal bone, to about an inch above it on the forehead. It was simply a plain cut, I took away a spiculum of bone that same night; he also had another cut below the lower eyelid extending from near the inner to the outer canthus, across the margin of the lid. It was cut so as to leave the flap hanging; extending all the way from the inner to the outer canthus, with the flap turned out. I found that the lachrymal duct and canaliculi were cut into, and the wound was in a very ragged condition. It was late at night but I carefully cleansed the wound and stitched the flap back as nearly in the same place as I could. I introduced, I think, five sutures in the lower lid; but I put none along the margin of the lid. I didn't see the patient any more until the third day after the injury when he sent for me to call at his house. I found him in quite a high fever, the temperature being about 102°, with the symptoms of commencing erysipelas; at least so I thought. I called Dr. Borck in to see the case with me. He placed him upon iodide of potassium in five grain doses three times a day, and cooling saline cathartics; but from the severe inflammation, a portion of the flap sloughed away in

the canthus, and I had to remove that suture but the others I left for several days longer. You can see here the result was that the flap became adherent to the malar bone, and in fact I think it is fortunate that it did, because it acts as a kind of prop for the lid and holds it in position. I have attempted to introduce a sound through the duct but it has been impossible to enter it and I have no doubt that it was entirely cut through.

CASE II. The other case Mr.——came to me last July. He had been in the hospital about two weeks, and when he came to me had a lachrymal abscess, and a stricture of the canaliculi, with severe inflammation. There was matter coming out of his eye in very large quantities; and the eye was very much swollen. He had both scleritis and conjunctivitis. The abscess opened and a fistula was formed through which I could introduce an ordinary sized catheter. There was a great deal of swelling which extended all around the eye. I never saw a case of lachrymal abscess in which there was so much swelling. The treatment was simply to keep the eye dilated and keep warm applications to the abcess. I can now introduce an ordinary number 8 sound in the canilículi and he tolerates the instrument with the greatest ease.

DR. POLLAK.—Both of these cases are exceedingly interesting. They are diseases of the lachrymal canal. The one on the right is an ordinary dacryocystitis, with the formation of an abscess; and when this has opened the trouble usually subsides. I have no doubt the case will get well without any further treatment. In the other case I have no doubt there will have to be a plastic operation performed sooner or later; the lower lid will have to be detached and a portion of integument put between the margin of the lid and the present cicatrix; and also, I presume it will be necessary to make an opening into the inner canthus into the lachrymal canal, as there must be a way for the tears to escape or else they will trickle down the cheek and cause erosion. All this is within the reach of oculistic surgery. The canalculi when once destroyed can never be restored; but we can make an insision into the lachrymal canal and in that way the canal can be kept open without difficulty and thus avoid the stillicidium that would otherwise be present.

DR. BORCK.—I will state that when I first saw this case there was certainly erysipelas extending all around the eye. But what

I want to call attention to is, this, as the doctor stated, I recommended iodide of potassium, I always use it in traumatic erysipelas. I think it is the best, and most successful treatment. In addition to this I give quinine; and in a few days the erysipelas subsides.

DR. LUTZ.—What did you use locally?

DR. ROSENTHAL.—I will state that we used nothing locally but warm water for the erysipelas; but later we washed the wound with a solution of carbolic acid. The flaps did not unite by the first intention, and I washed them off every day with a solution of carbolic acid. I put in about 20 drops of carbolic acid to a pint of water. I would close the eye carefully so as not to get any of it in the eye and then wash the parts with the solution.

DR. LUTZ.—I asked the question for the reason (and in this connection it might be just as well to discuss the treatment of erysipelas as anything else) that it has been my plan, on the theory of the septic and parasitic nature of erysipelas, to add to whatever application I use, and I limit myself to either hot or cold water, to make the water antiseptic with carbolic acid; and I think since I have been doing that, I have had better results than before. I am treating now a case in which I think the beneficial effects of carbolic acid in addition to the local application of warm water are being especially illustrated. The lady is about fifty years old, from whom, six months ago, I removed the right mamma for a scirrhus cancer, the wound uniting throughout its full extent by first intention. I thought I had removed all the enlarged glands in the axilla. I laid open the axillary space widely and was very careful in my search for enlarged glands: and yet, after six months exactly from the first operation, I found it necessary to remove enlarged glands from the axillary space. The woman being one of intelligence readily understood the necessity for the second operative interference, and at once submitted. She got along very nicely for two or three days, and then the wound began to assume an erysipelatous hue; and this rapidly spread down the arm and over the back, and then over the breast. In twenty-four hours after I first saw this hue I found the entire body almost, with the exception of the left side of the thorax, erysipelatous. She

being a strong woman I at first attempted to employ cold water properly carbolized, but I soon found that I would have to use warm water. This is my observation that cold water is best in the case of young persons and warm water in cases of elderly persons. Cold water is not well borne by elderly persons in these cases, but warm water has a very beneficial effect. Well I used in this case a ten per cent solution of carbolized water. I took cloths wrung out of this water, and then over these, I placed Mackintosh cloth to prevent the too rapid absorption. Well I found when I began to use this carbolized water that the spread of the erysipelas was checked, and the patient is making a very good recovery. I have had some very considerable experience in the treatment of erysipelas; and last fall I had some very unfortunate experience in my own family. My mother died from general erysipelas. This treatment was not instituted by her physicians. I at one time suggested it to them but they seemed loathe to accept it, and it was not done. She was an elderly lady, and the erysipelas began in her head and travelled down her face, then down the anterior surface of the body, and the anterior portion of the extremities. It then made its way backward up the back, and came back to the head again and down the face. Of course she succumbed to the long siege. But in my hospital practice, where I am in the habit of using this carbolized water, I have had less erysipelas than I had before I was in the habit of using it. I have not had a case of erysipelas in my hospital after operation since I have instituted the antiseptic treatment; and that is one of the reasons why I claim an advantage, in spite of the many authorities to the contrary, of the antiseptic treatment in many of its forms. It was first suggested to me by a paper read by Tillmanns before the German Congress of Surgeons, in which he cites many experiments, and which met with the approval of the congress, as did also his deductions drawn from these experiments. He declared erysipelas to be parasitic or septic in its nature, and if that should be the case no better treatment could be instituted than the antiseptic treatment. Nusbaum suggested that in the treatment of septic peritonitis, the local application be saturated with carbolic acid, or whatever antiseptic is used, as the antiseptic being absorbed it results beneficially to the inflammatory process going on about the peritoneal cavity.

DR. WILLIAMS.—I would ask what antiseptic remedy the doctor gives in the erysipelatous cases internally?

DR. LUTZ.—Quinine.

DR. WILLIAMS.—The world is going crazy on parasites just now. There is no disease that is not septic in its nature from the journals and the people's talk. It has not been very long since we had a new discovery made in Vienna by some young man who claimed to have discovered the syphilitic corpuscle. That was supposed to have been a parasite. It has not been very long since a man in Cleveland discovered the essence of malaria; that was also supposed to have been a parasite; and the beneficial action of quinine was supposed to have been because it killed this parasite. Now in erysipelas the doctor claims there is sepsis also; and as we can not have sepsis without a starting point, in what way does it begin in this case. In other words when you have idiopathic erysipelas, where is the starting point for the sepsis. It is impossible to have erysipelas spontaneously, there must be a cause for it, there must be a beginning. Now Dr. Borck gives iodide of potassium as an antiseptic remedy also, I suppose; but I can't see exactly where its antiseptic character comes in. Quinine is certainly antiseptic, theoretically at least, and I suppose iodide of potassium is also. I don't believe in this theory of sepsis in all diseases; and at some other time I will take occasion to say more fully what I intended to say last Saturday evening when that subject was sprung upon me. I will venture to predict that in a few years this sepsis theory will perish entirely.

DR. GREEN.—We have two kinds of erysipelas, idiopathic and traumatic. Then we have superficial erysipelas and phlegmonous erysipelas; but whether it is traumatic or not there is sepsis. Bilroth in his work on general surgery, years ago, before we thought of sepsis and antiseptics, expressed this opinion. I have found it so myself and all those who pay attention to the phenomena come to the conclusion that it is so. Traumatic erysipelas, I might say, is always infectious. It may be from the discharge, we may assume that we have sepsis here just as well as in any other wound. Why? Because we have wound fever, and this comes from sepsis. We have different kinds of infections as we have got a good many kinds of diseases

which we treat internally; typhoid fever, for instance, which is a disease due to anæmia, is considered infectious now. I think a good many cases of superficial, idiopathic erysipelas are of a septic nature, but not all. I have found in my practice that there are some persons, especially old ladies, who will have attacks of superficial erysipelas about every six months or year, and they are usually anæmic individuals, and by giving them a good diet the attack passes off. There are a good many cases of traumatic erysipelas, even, that are of a septic nature; and that is the reason that the tincture of iodine used externally, does good; it is because of its antiseptic nature. A good many remedies that we used to apply without knowing why they did good, we know now it was because of their antiseptic properties.

Dr. Williams says that quinine is antiseptic theoretically. No, doctor, it is not theoretical. If you take a piece of meat that has become putrid, and pour some quinine upon it the smell will disappear in a few minutes; that proves the antiseptic property of quinine. A good many authorities say it makes no difference what kind of disease we have, if the temperature rises very high, there is sepsis—there is infection. I think that carbolic acid, iron or glycerine are efficacious in the treatment of this disease because they are antiseptic.

Dr. Rosenthal.—I have very little more to add in regard to the cases. As regards the antiseptic treatment I will say that I used antiseptic treatment in both cases. In the case of the man who was injured by falling from the car, I used antiseptic washes, carbolized water, and I also used antiseptic gauze in three or four folds to keep the light out, and the wound was closed antiseptically. I put a fresh dressing on every day during the prevalence of the erysipelas. I attribute the success in retaining the flap to the antiseptic treatment; and I attribute the success in the case of the fistula to the antiseptic washes and dressings.

Dr. Rowland.—In view of the results obtained I will take the liberty of stating some of my experience in the treatment of erysipelas, in regard to the local application which I have been using for a number of years with a great deal of satisfaction. The treatment suggested itself to my mind first many years ago when called to see an infant where the erysipelas commenced in the face, and had been treated by another physician for several

days. He was using nitrate of silver, as was then customary, trying to surround it with a ring. I think he had also used some iodine. I saw that the erysipelatous inflammation was extensive and the child was young and tender, and that, notwithstanding it had been my custom to use the same remedies, if I expected to save my patient I would have to look up something else. In doing so it occurred to me that,an application of acetate of lead and oil, making a kind of saponification (the oil I refer to is olive oil) would be a good application to exclude the atmosphere. I made the application and was very much pleased with the results; and I continued to use it. I made it by taking acetate of lead, Goulard's extract, in a very concentrated solution, and mixing it with the olive oil when we will have a creamy saponified oil. I used this very extensively during the late war, as a local application, and never had cause to change the application except to add carbolic adid, during the last ten or twelve years. I use, say to the ounce of sponified oil, two or three drops of carbolic acid. I will state further that I have recently been well pleased with vaseline as a snbstitute for the olive oil. I had used previously the acetate of lead in a solution of water, and I found that it didn't produce as good an effect; it dries out too soon. I have used the carbolized glycerine in water, and I found it to be a good application, but it is not as good as the other application. I was called to a lady sixty-five years of age, some twelve months ago, in whom the erysipelas commenced about the head, and had prevailed, when I saw her, three weeks. It had gotten down below the umbilicus; on one side it had gotten down to the hip, nnd was travelling downward. She had been under the treatment of a reputable gentleman. I didn't learn what he had used exactly. But the erysipelatous inflammation was very extensive and was still travelling downward. I used this local application with the treatment usually given. I used quinine and iron freely, which is my custom, and the erysipelatous inflammation very soon became modified to such an extent that she was much more comfortable; in fact, she was irrational when I began to treat her, but she gradually improved, and while it had finally extended to the toes, she gradually improved and made a good recovery. In that case I used the carbolic acid a little stronger than usual, and there seems to have been a more septic condition of the system in her

case than in many others that I have treated, and in her case I used it as strong as I felt at liberty to. I give this to the society simply as my experience. I don't know that I have heard of any one who has used this remedy just as I have used it. I wish to lay some stress upon the manner in which the acetate of lead and olive oil should mix, or the vaseline, which is equally good. If it doesn't produce a beautiful creamy substance, it isn't properly mixed. I recently wrote this prescription and it was sent to a very good druggist, but the result was not a good mixture; he had not triturated the vaseline to a sufficient extent. An ounce of vaseline will take about one drachm of Goulard's extract of lead, which is equally good in my judgement.

DR. DUDLEY.—I want to ask whether the prime object in the use of these local applications is not to exclude the atmosphere?

DR. ROWLAND.—In using the oil the atmosphere is most effectually exluded, without producing a coating that is difficult to get off; consequently it is more cleanly than any other application.

DR. JORDAN.—There is a remedy which I have not heard mentioned, which I have used with a great deal of satisfaction; and I think, as Dr. Dudly says, the chief object in the use of these applications is to exclude the atmosphere, as the atmosphere has an irritating effect on the skin. I have found that by making an artificial skin of collodion, we can exclude the atmosphere very nicely. Of course, this must not be put on very thickly. We can take a camel's hair brush, and coat the part with a thin layer. I remember treating a child nineteen days old, in which the disease appeared on the nose and spread to the fontanelles, and to the chest and it was going to the ends of the fingers. I followed it along with this application and the child seemed to have no trouble. I gave one or two drops of muriated tincture of iron well diluted. The child got well and when the disease had passed away, the child's head looked like a peeled onion. It is very easily removed, by applying oil to the artificial skin you can remove it very readily. I have no trouble myself in treating erysipelas, at least in keeping the burning sensation down with this application. Of course I use other remedies such as large doses of muriated tincture of iron and quinine.

DR. MEISENBACH.—I have tried all the remedies used for erysipelas and I don't know that there is one that I should prefer. The local remedies are used: First, for the exclusion of the atmosphere, and; Second, for their astringency upon the parts. There is no doubt that collodion has the effect of contracting the capillaries of the parts to which it is applied. I think astringency is one of the prime factors of carbolic acid in its local effects upon erysipelas. If we take a 20 per cent. solution and work in it we find the hands after the operation markedly constringed. There is a numbness and tingling, and you find the skin corrugated. If you use collodion the same action takes place. I think that our main dependence in the treatment of erysipelas must be the constitutional remedies, whether it be quinine, iron or carbolic acid. If there are any remedies upon which I would place my dependence in treating a case of erysipelas they are quinine and iron. I distinctly remember a case occurring in my practice of an infant nineteen months of age. The erysipelas began in the neck. There was first an excoriation such as may often be found in infants in the summer time. This gradually became erysipelatous. I gave the muriated tincture of iron, simply using some unguent to exclude the air. The erysipelatous inflammation traveled the entire length of the body, and then gradually the epidermis peeled as the inflammation receded. I think, in the great majority of these cases, especially of infants, we can do very little except administer internal remedies. In the matter of local applications, one physician becomes accustomed to one remedy and another to another. The principle of their action I think is very similar. I recollect a case of phlegmonous inflammation that occurred from the amputation of a leg. The only remedies used were quinine and iron. The case had progressed so far that external applications were out of the question altogether. The whole cellular tissue through that portion where the amputation had been performed, up to the hip joint, was a thickened mass of matter. Abscess after abscess formed among the fascia of the muscles and were opened as rapidly as they formed. The man underwent that siege for four months, and it was only through the most strenuous efforts on the part of the attending physician and the indomitable energy and will of the man, I think, that he came out all right. There is one suggestion I would make in regard to the use of ether and

collodion, and that is I think the addition of a few drops of oil make the application more consistent and improve it.

DR. JORDAN.—I might say that I am in the habit of using a few drops of oil in it.

DR. POLLAK.—I have seen that the application of collodion in erysipelas resulted in sloughing. I have seen it repeatedly—a dozen times in my life. I remember having seen the scrotum slough away from this cause. It is not elastic enough. I am afraid to use collodion. I have not used it for a long time, and will never use it again. I have seen it in hospital as well as in private practice.

DR. JORDAN.—With all due respect for Dr. Pollak's opinion and observation, I must say that I have used it very frequently and I have never seen a case of that kind slough. I don't know what has been the experience of the gentlemen in the use of it, but I have used it repeatedly and I have always had good results. Of course, I believe in the internal treatment; that is, large doses of quinine and muriated tincture of iron are necessary.

DR. LOVE.—I think the sheet-anchor in erysipelas is the constitutional treatment. I believe in giving heroic doses of quinine and iron: teaspoon doses of muriated tincture of iron every two hours, and ten grains of quinine every three or four hours. Get them freely under the influence of it. I believe every case of erysipelas can be parried if treated in this way. So far as the local treatment is concerned, I take it that erysipelas is an irritation of the skin and should be treated the same as a burn. The best application is an emulsion of equal parts of olive oil and lime water. The alkali relieves the pain, and the saponified mixture, so to speak, produces a perfect covering from the air; and five drops of creasote added to this is beneficial. We have had for years and years all sorts of local applications, poultices of flour, silicate of soda, collodion, etc., for the purpose of excluding the atmosphere. Silicate of soda and collodion exclude the atmosphere, but they also produce an irritation. I remember a patient who has had a dozen attacks of erysipelas during the last ten years. I have treated that man with silicate of soda, etc. The last three or four times I simply used a soothing emulsive application very nearly the same as Dr. Rowland recommends, and the patient said to me: "Never use anything else but

that." It produces most perfect comfort. I saw the recommendation some time ago of the saturated solution of soda as an application in case of burns to relieve the pain; and I believe that if there is much local pain in erysipelas, simply covering the part with oil or vaseline would answer every purpose; possibly a little creasote might be added with good effect. I think silicate of soda and collodion are too irritating.

DR. CRONIN.—I am really interested in what I have heard this evening, but it strikes me that Dr. Love is the only one who struck the rationale of this treatment. There is in erysipelas a condition that is self limiting, The disease will pass away without any treatment. But while that is true of the disease primarily, sometimes the local congestion extends to the capillaries and now any remedy that will cure that congestion and reduce the inflammation of the parts, will really accomplish what we desire. For example we have bicarbonate of soda, a remedy which I have tried extensively in this condition—that resulting from vaccination. Many of the gentlemen have had experience in such cases. I have seen probably two or three hundred cases resulting from vaccination in the schools and elsewhere, where there is a phlegmonous condition of the parts adjoining the point of vaccination, usually of a more or less superficial nature. By applying the bicarbonate of soda, a chemical action takes place and we find that there is an acid reaction. Dr. Rowland accomplished nearly the same thing by combining an acid with oil, forming a saponified mixture. The oil not only neutralizes the acid in the mixture, but that of the part. I have been very successful in the use of soda. I give it internally in teaspoonful doses and it accomplishes wonderful results. But nine-tenths of these cases are limited.

SATURDAY March, 25th. 1882.

Improved Comedone Extractor.

DR. OHMANN-DUMESNIL.—I wish to present an instrument. This is intended for the extraction of comedones. As we generally find these instruments devised, there is only one hole. I have had two holes made in this one, one small and the other

larger; because, if the comedone is small the hole should be small, as upon pressure it will force out the plug much better than if it were larger; and we can use the large sized hole for the larger

Fig. 9.

The ends are drawn twice the natural size for the sake of greater clearness.

comedones. You will see the edges have been rounded in order that the skin may not be injured; and the holes are also conical to permit a free escape of the sebaceous matter. This instrument was made for me by Mr. Pelgree, of this city, and I have found it to work admirably.

On Modern Methods of Anatomical Research. By A. C. Bernays, M. D.

In the life of science there are changes and transformations. These are ordinarily regular, but sometimes during a number of decades there seems to be a striving for a revolution, or a change which eventually takes place in a few years. Even should we consider progress in the life of science to be merely an accumulation or an addition of experiences and facts, an effect upon our previously acquired knowledge can not be denied. Therefore, the change is not only one of quantity but also of quality.

The younger a science is, the more numerous and manifold are the criticisms which are passed upon it. Some never advance from their ancient standpoint, others overlook only a very small portion of the new science and still others, enthusiasts, give it too large a field.

Let us look upon anatomy as the science of the connection existing between the different forms of organisms. In so far as anatomy teaches the structure of organisms, their composition of different organs and the elements of the organism, its method is analytical. The results of the investigation, *i. e.*, the immediate, result of the analysis is exhibited by description. The descriptive stage concludes the first condition of all research. We cannot consider the end and aim of our research to be attained by description. In some cases the end is apparently reached, viz.: if our object was only the knowledge of an organism for any practical purpose. This is the case with human anatomy, the mission of which is principally to assist practical medicine and other allied disciplines.

It is evident, however, that a mere description of facts observed cannot be the highest aim of science. What would be the gain if anatomy simply described the structure of every animal and every organ by its form, its weight and its density? Would we thereby gain any sort of understanding for these manifold phenomena? This method of merely discovering and describing facts achieves no other end than the accumulation of infinite material which cannot be mastered by the judgement but only by memory.

However, we must not fall into the error of underestimating the value of a firm empirical basis; but let us not overestimate it by making it the exclusive aim of science.

This aim can only be reached by a logical synthesis of the purely empirical results and *when anatomy makes this its object* it becomes a science.

By the anatomical examination of an organism or an organ in its *relations to others*, we widen our views. Our object appears in a new and different light from that in which it appeared when examined and described by itself. Anatomy is changed into comparative anatomy by this process of the mind: it compares, *i. e.*, it hunts up similarities, and by proving similarities in different organisms, brings them into relations with one another. Many erroneous notions are current concerning this discipline. It is a popular belief that anatomical work upon animals (Zootomy) is comparative anatomy, as opposed to human anatomy, (Anthropotomy). But wherein does the anatomy of a bird or a worm or a reptile differ from human anatomy excepting in its object of investigation?

The anatomical examination of a reptile is just as well within the field of anatomy as the examination of the human body. But the anatomy of animals, no matter of how many different ones, is not comparative anatomy. It only becomes comparative, when conclusions are drawn from the description of facts, which themselves are only premises.

Modern anatomy has made this process of critical comparison its principal method of investigation. This method must be handled with the greatest care, by considering all circumstantial facts, and using them logically. Without a logical and critical proceeding this comparative method is worse than useless. A good example of unscientific comparison is the well-known instance of comparing ventral marrow of invertebrate animals

with the spinal marrow of vertebrates. Here the most important facts are ignored, and general irrelevant circumstances are considered conclusive. The course of the ventral marrow along the sides of the body and the regular distribution of nerves to the consecutive articulations is observed, but the fact that the spinal marrow is dorsal, whereas, the ventral marrow is not, is disregarded. It is also known that the spinal marrow and the central organs of the nervous system are developed out of the ectoderm or the upper layer of the germinal plate. The representatives of these organs in invertebrates are the pharyngeal ganglia which are also developed from the medullary plate of the ectoderm. This example is an illustration of the false paths upon which we may be led by disregarding the most important relations, and we recognize the necessity of critical comparison.

Another simple example may be given to demonstrate the difference between the so-called descriptive anatomy and the comparative or critical anatomy. I will give it also to show the modern method of anatomical research.

The absence of movable ribs in the cervical portion of the vertebral column of mammals distinguishes it very markedly from the following or thoracic portion. A second peculiarity is found in the perforation of the transverse processes by what is called the *foramen transversalium*. This foramen distinguishes the cervical vertebra from all others. So common anatomy teaches. Proceeding now with our critical examination of the transverse processes of the cervical vertebræ we find a difference between them and the thoracic vertebræ aside from the perforation. We see that in reality, only the dorsal portion of the process corresponds to the transverse process of the thoracic vertebræ. Looking at the connection of a rib with a thoracic vertebra we remark that the vertebral end of a rib appears almost exactly like the anterior portion of a transverse process of a cervical vertebra and in the connection of a rib with its vertebra a foramen is formed which appears very similar to the foramen transverse of a cervical vertebra. Furthermore we remember that sometimes the seventh cervical vertebra is minus an anterior portion of the transverse process, which is represented by a movable bone, different from a pectoral rib only by its lesser length. Thus we have arrived by our comparative and critical treatment, whichwas by no means exhaustive, at a number of points toward a new view,

differing very much from the one above expressed. We can no longer describe the transverse process of the cervical vertebra simply as perforated, but we will only consider them as transverse processes so far as their posterior portion is concerned and we will declare the anterior portion to be a rudimentary rib, which has been blended with the transverse process and the body of the vertebra. This interpretation places the peculiarities of the cervical vertebra in consonance with the rest of the vertebræ; it accounts for the foramen transversalium and it enables us to understand the exceptional condition, where we find a movable rib upon the seventh cervical vertebra. All these things, by the old way of examination, were unintelligible, that is, they appeared as peculiarities without reason. This interesting instance shows how the critical method leads us to scientific results, when confined to one organism.

The cardinal point of our subject lies in the manner in which we look upon the world of organisms. We may regard each single organism as independent of the rest, each the result of a separate act of creation. I cannot now enter upon the question, whether or not it is proper to deny the solidarity of the world of organisms, which is being made more probable by new facts every day.

If I choose to follow out the instance above given of the cervical ribs in man by comparison with lower vertebrates our notions will again become more precise and clearer in a different way. Even in reptiles we see movable ribs on the cervical portion of the vertebral column. In birds, only a small portion of them remains movable, and if we descend still lower and examine fishes, we find scarcely any difference between the cervical portion of the vertebral column and the posterior portions.

Let us suppose now, as is indicated by numerous conditions, that in the ancestral line of mammals, fish-like organizations must have existed, and let us furthermore reflect, how in the ascending scale by gradual differentiation of the vertebral column a retrograde process is noticeable so far as the ribs are concerned in its anterior portion, in such a manner as to make the head more movable and we will be more enabled to deduce those rudimentary ribs of mammals from originally well-developed ribs. They are therefore now well understood in all their relations.

Dr. Bernays then gave several more instances illustrative of the critical and comparative method of anatomical research. These most interesting remarks were demonstrated upon the blackboard by numerous diagrams and drawings. Not being able to produce these drawings here, the remarks would be unintelligible and must therefore be omitted.

DISCUSSION.

DR BORCK.—Dr. Bernays mentioned the fact that he used carmine to inject the artery; mercury answers the same purpose; it shows the little vessels quite as well as carmine.

DR. HURT.—I do not rise to criticise the views of my young friend. I think the paper does him a great deal of credit. The facts are indisputable, but the inferences drawn are not quite so conclustive. It has suggested one thing to my mind very forcibly; that is inferentially. I can see very plainly how it is that a monkey has a tail, and how a man is so nearly related to a monkey that he is a monkey with his tail tucked up. The analogy and the relations supposed to exist between living beings are very interesting, of course; but it has always occurred to me that in making out these relations between the different species we were obliged to draw more or less upon the imagination. We are not able to say what has become of this plexus of blood-vessels in the young frog after his tail has dropped off. The doctor omitted to explain that.

DR. BERNAYS.—The example I referred to of human anatomy, of the cervical ribs is probably the best example to prove the point, namely: that anatomy becomes a science only when it is treated in a comparytive and critical manner, and that as long as it is considered the housemaid of surgery and medicine it is not a science. You see how clearly I showed how the foramina transversalia could be accounted for, which, without this comparison, was unaccountable.

DR. FAIRBROTHER.—As I understand the subject of this paper, it is not, as Dr. Hurt and some other members seem to infer, to connect us with the lower orders and show our lowly origin; although these several points do that incidentally. The subject of the paper, is to bring into prominence the value of comparative anatomy over mere descriptive anatomy.

DR. WILLIAMS.—Dr. Bernays' paper is certainly very inter-

esting; but there is one statement that he made which it seems to me is objectionable. He refers to the lower order of beings and states that fishes have ribs from the occiput down the whole length of the body, and that higher in the scale of animal creation the first ribs disappear; as for instance in man there are no ribs corresponding to those on the neck of the fish and the doctor claims that this is a retrograde process; it is an advance It certainly is an improvement because it gives more freedom in the movement of the head.

DR. BERNAYS.—It is certainly a retrograde process; our early ancestors must have had ribs up to the occiput, because in man we have rudiments of those ribs. You do not speak scientifically when you say it is advancement. It is a retrograde metamorphosis a falling away of ribs on the cervical portion of the vertebral column. It is advancement teleologically speaking.

DR. MAUGHS.—I did not hear Dr. Bernays' paper but it was no doubt interesting and profitable; and indeed comparative anatomy is necessary to an understanding of human anatomy as we find that most anomalies that are present in human beings are normal types in animals below in the scale and are not unfrequently simply an arrest of development, or a reversion to the original type. The great Cuvier says there are four original types: the articulata, mollusca, radiata, and vertebrata; and it is an utter impossibility to make one out of the other. If you take a vertebrate, no matter how low in the scale, you can develop it into a man; but you can never make a man out of an oyster; and you cannot make a man out of a star-fish if you develop to all eternity. It is a fact that there is no possibility of transmuting these four original types. If we take a class of vertebrates we have no difficulty in developing all the other species in the scale and even man, it is simply a process of differentiation; special acts instead of the more general organisms of lower formations. You may develope man from a frog, and the development is not due to the imagination; it is simply a matter of science. You can transmute the species; embryology shows the very close relation between them. For instance, in the human fœtus of six weeks we have the brachial arches and the heart as we have them in the fish. And there is a very remarkable resemblance at the sixth week between the embryo of

a turtle, a chicken, a dog and a man; and you will find the brachial arches developed the same. The resemblance is remarkably close between the dog and humanity and it is only after the sixth week that the seperation becomes distinct by the process of differentiation whereby the organic law of special genetic and generic force developes either a dog or a man as may be the origin. The embryonic stage of the subject shows that it is not a destructive metamorphosis—a retrograde metamorphosis—in these cases, but simply a change of structure according to the change of functions or a change of functions according to the structure controlled by the type force from which it originates. We find some remarkable resemblances in the embryo, for instance, between the fish and the dog and the man. It is very difficult to distinguish between them at a certain period; they all look as if they were intended for an aquatic existence. Humanity goes below the adult state of the lower type. They stop in their progress at a point where humanity passes through. As we pass lower in the scale we can readily determine this. Embryology does not teach that there is a retrograde metamorphosis so much as it teaches that certain animals are developed beyond those lower in the scale. Thus serpents have ribs the entire length of the body, fish also have ribs from the occiput to the tail; in humanity you have a type that goes beyond that, it is not a retrograde metamorphosis. Instead of the continuous ribs which would be useless there are the lineæ transversæ which cross the abdomen. Man has the ribs of the serpent represented by long transverse lines. Then he has a cæcum which is the rudimentary second pouch or stomach of the ox. There is a time when the embryo of humanity represents a fish or a serpent and if arrested in its devolopment it would resemble a serpent or a fish. There is a time when the embryo of humanity, if arrested in its devolopment would represent an inferior animal a lower type according to the class through which it was passing at the time of the arrest. We frequently come across cases of such arrest of development. Dr. Todd. some time ago in making a minute dissection of the throat of a child found an abnormality of some of the muscles of the throat; it was a peculiar condition of those muscles which one of the most learned anatomists might have overlooked, but Dr. Todd being a specialist and dissecting for a certain purpose noticed it: some

time after, in dissecting a monkey that had died at the Fair Grounds, he met with the same condition, and he found that it was a normal condition—absolutely the normal type of the monkey. This anatomical peculiarity was simply an arrest of developement. We see that some organs are rudimentary, such as the mammary glands of the male. It is not a retrograde metamorphosis, but an arrest of development.

DR. DUDLEY.—Before the doctor takes his seat I would like to ask him whether he has any theory as to the cause of the arrest of developement which occurs so frequently among the human species.

DR. MAUGHS.—No one, probably, can give a cause for all these occurances. It is simply a type force that exerts itself; it may be at the time, or subsequent to conception. I think I can illustrate it very clearly as it occurs in some cases. When stock growers see a horse with the marks of the jack running down the back, a dark stripe upon either hip, they tell very readily that the mother had a mule colt the year before. It is well known that a woman sometimes retains the impression of a former husband; and it not infrequently happens that the children of the second husband bear the peculiarities of the first; this is owing to a profound impression, stereotyped into the genetic force of the mother by the first father. There may be no disturbance of the circulation; this may be the result of a strong mental impression made upon the woman—a permanent, lasting impression made upon the blood and tissues. The close connection existing between the mother and child; the vascular and nervous connection, makes it possible for her impression to result in an arrest of de-developement of a child. Now while it is a fact that most mother marks and monstrosities in the world occur from causes that cannot be determined, there is no doubt that some of them are in accordance with popular beliefs. Before Dalton published his Physiology I wrote an article—that is some thirty years ago—which was published in THE ST. LOUIS MEDICAL AND SURGICAL JOURNAL, in which I stated my belief that a strong nervous impression of the mother might produce an arrest of the developement of the fœtus. There may be a reversion to a former type. Then again a great deal may result from the manner of feeding. For example the bee is an instance which shows how much may be done by this means. If the bees wish to raise a

queen, they feed the young on delicate food—the nectar of the Gods. If they wish to raise working bees they feed it on the less delicate food; if they wish to raise the worthless drone they feed it on grosser food. We cannot exactly modify a man in that way; but we can change his condition very greatly; and while we cannot absolutely make as great a difference as the bees do, if we take the tens of thousands of years during which he has struggled for existence—and it is impossible to count the periods—it is possible to conceive the developement of the mental and physical structure from a man-like monkey to a monkey-like man. Take for instance some of our standard hogs weighing 400 pounds; they originally came from the wild boar; so it is with our Durham, short horned cattle; they were developed simply by artificial selection. What we do artificially in a few generations, nature had done in hundreds of thousand years by natural selection. We look upon the world somewhat like an ephemeral May-day fly would, that is born in the morning is middle aged at noon, and reaches an old age at sunset. It would say "man lives eternally the same; some are infants in their mothers' arms, some are grown men,and some of them are boys running around. Everything exists eternally without change because I noticed it just so when I was born a way back when time itself was young, this morning; when I was just coming into existence I noticed that humanity was that way, and now I am ready to die of old age, and they still remain so, therefore they never change." The 4000 or 5000 years of which we have an imperfect history bear no more relation to the times gone before, than the existence of the May-day fly bears to humanity.

DR. FAIRBROTHER.—As I understand Dr. Dudley's question he referred to the arrest of developement. I should not undertake to answer it for Dr. Maughs, but if I did I should say that it was owing to the law of supply and demand. If there is no demand for ribs in the neck they will disappear under this law just as they will appear under it. If there is a demand for a hard hand—an increased developement of the cuticle on the palmar surfaces—that developement will take place. If there is a demand for long finger nails for climing, we will have a developement of long finger nails; and so on throughout the whole animal evolution. If there is a demand for a hard shoulder on a horse, the use of the collar will result in its developements.

DR. WILLIAMS.—According to Dr. Fairbrother's idea all that will be necessary to convert a man into a bear would be to send him into the woods and compel him to climb trees.

DR. MAUGHS.—I regret that I didn't know the subject of debate. I am not in the habit of thinking upon my feet. I have never been accustomed to it. When I lecture I always know the subject in advance, and therefore I am not like a man who is in the habit of extemporaneous speaking. I am in the habit of thinking in my chair or on a lounge. The subject which Dr. Bernays has chosen is very interesting and one about which a great deal can be said. I can't suppose that a man would become a bear simply because he had a few trees to climb; but there is no doubt of the possibility of developing higher forms of life out of lower. We have every link between the serpent and the duck. The great Cuvier could find no link between the ox and the horse, but we have that link now, it is the Hipparion. When the world was an illimitable ocean of warm water with only a few elevated places, the whole probably swarmed with serpents; nothing greater than that existed, but as the waters gradually subsided higher forms came into being. I have no doubt that 500,000–600,000 years ago humanity was struggling with the cave bears for a precarious existence and, on account of the greatly superior strength of the latter, would undoubtedly have gone under in the struggle but for the fact that he could communicate his thoughts to others; which was not possible with the cave bear, the odds might have been against him. It was possible for the man to go to his neighbors, who were scattered around over a hill range perhaps, and say to them on such and such a day we will attack cave so and so, and if his only weapon was a pointed stick, it became a formidable weapon against these animals by virtue of the joint action of many. Many species of animals have disappeared from the earth altogether. The Dodo has disappeared so that its existence was doubted—it was looked upon as a fabulous bird. 300 years ago when the island of Mauritius was discovered the sailors found the island swarming with this uncouth bird—they covered the whole island, and were so lazy or stupid that they could not get out of the way, they did not try to get out of the way and the sailors took sticks and killed large numbers of them. These birds are now extinct, they could not withstand the attacks of

men and dogs, and it was even doubted that such a bird had ever existed until a stuffed one was found in the British Museum. This is equally true with humanity. The Caucasian race is gradually crowding out the other types of humanity, and the time is coming when the lower types will cease to exist. The Indians are disappearing very rapidly and the time is rapidly approaching when there will be no red men. Our children will see the last of the red men. Changed environments without change of structure necessitates decay and men and dogs alike must yield to this, the inevitable.

DR. DUDLEY.—I didn't intend to discuss this subject. The gentlemen who have spoken upon this subject have taken it for granted that these results follow from an arrest of developement, and when I propounded the question which I did to Dr. Maughs I referred to such cases as Dr. Bernays spoke of and which were drawn from comparative anatomy. Dr. Maughs also spoke of a case which one of his colleagues met with in dissecting the neck of a child—a peculiar condition of the muscles which he considered abnormal and that he afterwards found to be a normal condition of the muscles of the neck of the monkey. The doctor has given us an interesting discourse but he has not answered my question, or at least not the question I had in my mind.

It seems strange to me that gentlemen will take refuge behind this doctrine of arrest of developement. That from the lower species to the higher there has been a great improvement all admit; but it seems strange to me that whenever we have what is called an arrest of development of the human species, from the earliest history that we have of man up to the present time, it has been looked upon as abnormal and a retrograde from the present status; and yet we have no history whatever to show that man has ever retrograded and fallen below the human species.

Vesical Calculus.

DR. BERNAYS.—If no one wants to speak any more on this subject I have something here which will set the gentlemen talking, telling of the large stones they have extracted from the bladder. I have one here which is of rather a peculiar shape which I took this morning from a young man twenty-two years of age. It is a mulberry shaped stone probably consisting principally of oxalate of time. It weighs two ounces.

SATURDAY, April, 1st. 1882.

Observations on Surgery in Children. By Edw. Borck, M. D.

MR. PRESIDENT.—I have chosen this topic, because it is an interesting and practical one. Some surgeons and teachers of surgery maintain that surgery is surgery no matter whether manifested in the child or adult. This I admit is true as far as the meaning of the word itself is concerned. I contend, that when we come to practical points, and have to deal with disease, and injuries of bones and of the soft parts, though they may be the same *kind* in the child as in the adult, still we will meet with vast differences in symptoms, diagnosis, prognosis, and treatment; and will find we have to encounter and overcome many different and difficult points.

The diseases that exclusively belong to children are few; the greatest majority of them occur at all ages; but every physician knows that the symptoms and the course they run, is greatly modified by age. Does this not hold good in surgical affections; Do we not find here differences in degree? Does not the peculiarity of constitution, at different ages, influence injuries?

The question then naturally arises, what constitutes surgical diseases of infancy and childhood? Answer:

1. Congenital malformations and deformities, of which class orthopedics offers the largest field.

2. Those acquired of which the separation of the epiphyses are met with in children only. Others, such as dislocations, fractures, burns, etc., etc., can take place at any age; the latter two, however, are of more frequent occurrence in children than in adults.

CONGENITAL MALFORMATIONS AND DEFORMITIES.

Of this class many require immediate surgical interference; while others again may be deferred to a later period in life; but the time of seeking the aid of surgery is often put off unnecessarily long. Of this class, the majority, if curable or remediable at all, can be cured or remedied much more readily and successfully in early infancy; for, if without any good reason, postponement is practiced advantages will be lost which the child possesses over the adult. To illustrate, take

WEB FINGERS.

I know a family, in which, four of the growing up children, have each the middle and ring-finger on both hands webbed. The oldest child, when an infant, was taken to one of our well-known surgeons of the past, who recommended postponement of the operation. The patient was taken there, time and again, but still, the time for interference had not yet arrived. "Wait, until the child is more completely developed, you can do nothing with a baby." Three more children were born, subsequently, having the same deformity. With all, the waiting plan was practiced, and now all four have distorted and contracted fingers. I doubt very much, if these unfortunates were to be operated on to-day, if the result of the operation would be much of an improvement. Such was the honest opinion of some who have passed into that realm from whence no one returns. By experience the possibilities of surgery have taken a wider range and admit of applications till recently unknown. Some now present may remember the case of supernumerary and webbed fingers, which I presented to the society some five years ago, and showed the little phalanges I removed. The infant was three months old at the time. Could you now see the little fellow, I think you would be delighted with the result. Had I put off the operation until the child was fifteen or twenty years old, no such satisfactory result could have been obtained.

HARELIP.

This is another malformation for which I should prefer an early operation. You will also recollect a case I reported a few years ago, in which I performed three successive operations, to correct the deformity of a complicated harelip, on an infant in the first month of his life. One year after the operation, when I presented to you the photograph, you could hardly observe any cicatrices. He presented an admirable result and a well-formed face. But those very successful cases are the exceptions. However, I admit that what I *would* do to-day, I would not or could not have done twenty-five years ago; the more frequently that one sees and treats cases, the greater confidence he will gain in his power to remedy; the more one observes, the more interesting will be to him such cases of *lusus naturæ;* I may add that the greater part of the knowledge I may possess or facility in distinguishing and treating those injuries I obtained through my own

observations ever before I read a treatise on surgical diseases of children; in my college days these distinctions were not pointed out to me.

In the early treatment of deformities,

ORTHOPEDICS

offers a promising field.

I will strengthen my argument by a case in point. A few months ago a lady was on a visit to the city from the country, and was the mother of an interesting pretty little girl four months old. I saw the child at my house, and while caressing the sweet creature, the mother remarked, "that is a fine baby, doctor! I intend to have you operate on her after she is older." "What is the trouble with the child?" I asked. Lifting up her little dress, she presented a pair of bow legs with talipes varus. "Wait until the child is grown up?" why not treat her now; operation now is much easier performed and will be followed by better results. The lady with amazement exclaimed, "Oh! doctor; I would not have the baby cut now, for anything in the world! My old family physician told me we can do nothing with babies, but after the child has grown up, he would recommend me to a surgeon, who would perform the appropriate operation." Now, such are the prevailing opinions of the people, and in them they are encouraged by many physicians, because they have been taught that surgery is surgery. However, I succeeded, with very little trouble, in convincing the lady that I had said nothing about "cutting"; showed her how easy the limbs could be straightened and kept in proper position, and without any pain or much inconvenience; that such would not be possible if treatment was delayed five or ten years.

NÆVUS

is another affection that can be managed much more readily in infancy than in the adult. I need not enter into any detailed description of the various methods of treatment; but will suggest a simple mode, by which certain kinds of nævi, by perseverence, can be completely eradicated. It is by the application of ergot plaster (this is not officinal and is prepared for me by Mr. George Ude, late president of Pharmacentical College.).

This much for the first division; let us take up some instances illustrating the second, viz: Acquired injuries, and first

SEPARATION OF THE EPIPHYSES.

The diagnosis of this class of cases is very difficult; but not impossible. You will be much more sure of your diagnosis, after treatment is commenced and progress made.

For the better understanding, I beg to rehearse briefly the mode of development of a part of a few bones, and then illustrate by two cases.

Humerus: The shaft is ossified throughout nearly the whole length at birth; but the extremities are still cartilaginous and in the lower end, ossification begins later, not till the end of the second year, in the radial portions of the articulating surface. The inner condyle does not begin to ossify till about the 5th year, and does not unite with the shaft till the 20th year, while the external condyle does not begin to ossify until the 12th or 14th year and perfects its union with the epiphysis about the 16th or 17th year.

Ulna: Ossified matter appears in the olecranon at the 10th year and unites with the shaft at the 16th year.

Radius: In the upper end or head, ossification begins at the 5th year and unites with the shaft at puberty. In the lower end ossification begins at the 2d year and unites to the shaft at the 20th year.

A moment's reflection will convince any one that the effects of injuries of the elbow joint must present different phenomena at different ages.

And when we remember that in the young the epiphyses are only united by cartilages we can then easily comprehend that the same cause that produces a separation of the epiphyses in the child, would necessarily produce a dislocation or fracture in an adult. A case in point in regard to diagnosis: A little child, about five years of age, was brought to me with her right hand turned or contracted inside. The history was as follows, viz.: About a year previous, she had sustained a fracture of the lower end of the radius; she was treated by the family physician; some deformity was predicted, but not that kind which was present at this time; the diagnosis was easy, there could not have existed a fracture through the bone or near the epiphyseal line, but only a complete separation of the epiphyses; no union had taken place; there had been absorption of the epiphyses; an arrest of growth or shrinkage. This result can

not happen in an adult. And here let me say, while we seldom meet with shortening in any fractured bone in the child, we will in the majority of cases of separation of the epiphyses from the bone, have shortening, especially if not recognized and not properly reduced, the inflammatory process will promote the destruction of the epiphyses. Though, when once reduced it is kept much easier in its place, than a fractured bone, and the result will be favorable. A short time since I saw another little girl, about seven years old, who had fallen and injured her wrist. The parents thought the injury only a bruise, applied some liniment, hoping nature would complete the restoration. The pain subsided but the swelling did not disappear entirely. My advice was sought after the lapse of three months, because the swelling had increased. Upon examination I found a large soft callus at the part and deformity. This child had sustained a fracture of the radius. The parents wanted the bone broken over again and set straight, but of this there was no need for, the rubber bandage successfully corrected that evil. In this case there was no contraction.

FRACTURES AND DISLOCATIONS.

Much could be said about fractures. Fractures of the femur, "my pet bone" as denominated by some of my colleagues, but the time allotted me will not permit; suffice it to say, that fractures occur for various reasons more frequently in children than in adults, but displacement in fractures of bones in children are rare, because the periostium in the child is much stronger than in the adult; sometimes crepitus is entirely absent. Here is a case of some interest: A child seven years old, (tall for her age and slender, so that the bones could be well traced), sustained a fracture at the middle of both the radius and ulna a year ago; no crepitus could be heard or felt. I treated her with a simple splint, and with good results. After removing the final dressing, supination and pronation were perfect. I met the child almost daily. Of gymnastic exercises she was very fond. Last summer I saw her one day with bare arms, and to my terror, I found her arm quite "bow-like," though she could use it. I immediately called the parent's attention to the fact; the rubber bandage being applied, corrected this evil also. How was it produced? By the contraction of the muscles or

reabsorption of the callus? One thing is sure, it could not have been corrected so easily in an adult.

BURNS AND SCALDS

Are accidents most frequently occurring to children, and are by far more dangerous than in adults, on account of the great pain, the long-continued irritation they produce and the great proneness of sloughing. Children seldom survive severe and extensive burns; and if they get well, recover from the immediate effects; deformities and distortions are apt to be left behind to remind of the accident. I need not here speak of the methods of avoiding or correcting these evils nor recapitulate the various means of treatment recommended and pursued, but will only allude to the alcohol treatment. First of all, the main object is to keep the wounds clean and sweet; to accomplish this, by all means discard the old and almost universal application of linseed oil; substitute either sweet oil or vaseline; do not bring water in contact with wounds produced by burns. Saturate a soft piece of fabric with alcohol, lay it over the burn, then cover it with cotton or finely picked oakum. This is the most cleanly dressing that can be adopted. It may be thought that alcohol applied to a burn will produce more pain; but try it, and you will be most agreeably surprised to observe how quickly it will *allay* the pain; subsequently disturb the dressing as little as possible; wet the dressing occasionally with alcohol, and the result you will find better than by any other method.

The last affection to which I will call your attention is that which occurs very often, and, one which you all, no doubt, frequently meet with; it is.

LOSS OF MOTION.

I will illustrate by a case or two, of which I can find no mention in any book.

A child is pulled, dragged or lifted by the arm in a quick manner, for example, over a gutter. The child cries aloud, drops his arm down after it is released, and has lost completely the motion of that arm for the time being.

The parents becoming alarmed, sent for a doctor, to ascertain what is the matter. He examines it all around, and like many others, concludes because there is loss of motion, "there must

be a fracture, though he is not sure, because it is a child, and it is hard to tell what the real trouble is in a child." I have been sent for more than once under such circumstances to set a broken arm, but could not find the fracture; a simple loss of motion comprehends the whole of the affliction.

A second case, a child falls, the nurse jumps and runs to pick up the poor darling, in most cases by one hand, with a quick motion, a little anger probably mingled with it, "of course it is always the nurse, mothers never commit such blunders!" The child screams bitterly, his arm drops down, it cannot move it; now follows excitement in the previous peaceful household. I have been sent for frequently in such cases, either by the parents or by request of the family physician, to reduce a supposed dislocation; but no dislocation is to be found, simply loss of motion. Fractures and dislocations of course can and are produced in such manner, and sometimes separation of the epiphysis. But it is to the loss of motion to which I call your attention; it is fortunate, however, for the little patient and fortunate for those concerned, that you can console them with the assurance that the limb will be restored to its proper position in time, almost without any treatment, except rest and some mild embrocation, providing you find sensation unimpaired; one should carefully examine and satisfy himself of this, else the case then may assume a more grave aspect.

Mr. President, this of course cannot be considered a complete survey of infantile or children's surgery. These observations are merely some hints suggested, to set us to thinking, and to show that the surgery of infants and children differ greatly from that of the adult, and for that reason it requires special attention and special study.

In conclusion permit me to say, in order to be successful, the surgeon must first of all possess a thorough knowledge of all the details belonging to this branch; the second requisite is, he must love his occupation, no matter what it may be; I know many practitioners well educated and successful in the practice of medicine in adults, but whose success with these little ones is *nil* Why? perhaps they do not like children; I know that to many it is a source of dread to be called to visit a sick child; if you ask the reason, the intimation is, "I can do nothing with children; they cannot speak, therefore one cannot ascertain what

ails them;" but the truth of the matter is, the doctor does not understand and has not learned the nature of children.

To be successful with children, one must like them (those sweet little creatures); nay, more than that, he must love them from the bottom of his heart; he must learn to understand their language and their different dispositions; he must have patience and be indulgent with a child in sickness and especially so in surgical affections.

It is necessary to gain the little patient's confidence in order to gain a certain control over him; and to accomplish this, it must be remembered that you cannot approach every child alike; also tell a child the truth, never deceive it.

As for myself, I like to handle and study these little innocent creatures. I have hundreds of photographs of children of different ages, in my possession, and often call the attention of my students to their different forms, and desire them to study their physiognomy. You may smile at that; but let me advise you of one thing: if you lift up a little child to put it upon your knee and fondle with it, don't only play with it, but let that very child be your instructor; learn something from the child while it slaps its little hand joyfully in yours, don't lose that opportunity, but grasp it gently, run your fingers over its little fingers or around his wrist and glide them along his arm; feel, but feel for something. You will educate your fingers, you will thus learn to distinguish the natural form of bones first, and I assure you if you understand the natural form and position thoroughly, you need not be afraid, the recognition of broken or displaced ones will be easy for you. And again, if you happen to pass your fingers through the golden ringlets, let that very hair teach you something. If you pass your fingers over the head, study the formation of that head; if you pat the cheeks, learn and observe something by that. The child is not aware of it, and rather delights in these little manipulations, and the mother does not know that her little darling has served you as a model.

DISCUSSION.

DR. HENSKE.—I did not understand the treatment of burns as suggested by Dr. Borck; is it simply to apply alcohol to the skin?

DR. BORCK.—I dip a piece of soft fabric in alcohol, wring it out and put it over the burn.

DR. BRIGGS.—I would ask the doctor if he has ever tried the bicarbonate of soda in burns?

DR. BORCK.—No, sir; I have been so much pleased with the alcohol that I hardly ever use anything else.

DR. BRIGGS.—I don't understand the *modus operandi* of the bicarbonate of soda. It is a fact that the contents of the blister caused by a burn are acid, but whether that is a clew to the action of the bicarbonate of soda or not I can't say. The bicarbonate of soda lessens the pain and also advances the cure. Where the burn is an extensive one; where you are afraid of a collapse from shock, it is extremely important to stop the pain promptly and bicarbonate of soda has obtained an excellent reputation for this purpose. I have used the bicarbonate of soda myself with satisfaction, and think that if Dr. Borck will give it a trial, he will find this remedy is not unworthy of the high encomiums lavished upon it.

DR. JOHNSTON.—There are three points in regard to the use of alcohol; first, it is irritating; second, it coagulates the albumen; third, it evaporates rapidly. If it coagulates the albumen so as to exclude the oxygen of the atmosphere it is a good remedy; but to my mind it seems a severe one. Whether the coagulating property overbalances the irritation that is produced I don't know. It is the oxygen of the atmosphere that causes the irritation and produces the severe pain. I don't agree with the gentleman's idea as to the value of water in this trouble. If you place the burned part in water you exclude the atmosphere, and it seems to me that this is an admissible remedy. If you have a burn and place the part in water you get instantaneous relief.

DR. ROWLAND.—As there may be some members present who have never used the bicarbonate of soda in burns I will state that about two years ago I was called to see a child eighteen months old who had quite an extensive burn. The child's clothes had taken fire and it was burned quite extensively over the limbs, chest and face. When I reached the room the child was screaming and seemed to be in great agony. The cuticle afterwards came off over large surfaces. Both cheeks were extensively blistered. The child was in so much pain that I thought very rapidly what could be done. We have a number

of remedies such as linseed oil, carbolic acid, flour and so on, but it occurred to me that I might use bicarbonate of soda with good effect. They had some bicarbonate of soda in the house and I made a saturated solution of it in cold water with which I covered the parts, and after doing so I put some in a bag, after the manner of using starch, and dusted it all over the excoriated surfaces, not dusting it on so thickly as to cause it to crack, however. I had reason to believe that it would form a coating. After doing this the child went to sleep in ten minutes. The grandfather of the child had burned his hand pretty badly in extinguishing the fire of the child's clothes, so I put some on his fingers and he said it eased the pain in five minutes. But the point that I want to call the attention of the society to is this:

There was a complete coating, which was somewhat elastic, formed over the denuded surfaces, and when this came off there was new cuticle below. It was the most perfect success that I have had in my practice with any remedy in the case of a burn. I have used it again since, in the case of a lady, but she was very restless and nervous and I didn't meet with as good success as I did in the case of the child. It did very well, however, in her case. I wish to state that there was no scar left on the child's face, although we very much feared there would be.

DR. MEISENBACH.—I would ask Dr. Borck if he uses alcohol in all stages of burns?

DR. BORCK.—I use it in all stages.

DR. ATWOOD.—In reference to what Doctor Rowland has just said in regard to the use of the saturated solution of soda I desire to call the attention of the society to the danger of deepening the shock attendant upon extensive burns. I have seen a case where the bicarbonate of soda was used in solution in cold water and the child died simply because reaction upon the shock was thus rendered impossible. We should first secure reaction and then the application should be made, whatever that may be.

DR. HURT.—It is quite evident to me that there are some cases of burns in which stimulation is required, and these are the cases in which the alcoholic treatment would perhaps be applicable. I have applied spirits of turpentine to fresh burns with very good results. I recollect once, when in a distant State, of being called suddenly to see a young child who had

been scalded, and I applied spirits of turpentine. The child got along very well until a druggist of the village, insisted that lime water and linseed oil was the specific remedy for burns, and the application was changed. In a few days the child died of mortification. I think possibly if the application of turpentine had been continued the child might have recovered. It is very evident to my mind that in case of burns the capillaries of the skin and tissues, as also the nerves are debilitated by the destructive process, and the result is that, in a great many cases, if there is no stimulation, a great deal of tissue will be lost by the suppurative or sloughing process.

DR. DEAN.—In the treatment of burns a good many use the stances govern as to what we can use. We generally circummost convenient thing. Dr. Borck and Dr. Johnston spoke disparagingly of the use of oil. I have seen oil applied where I thought it injurious, it kept the tissues macerated, increased the pus, and didn't permit the epethelium to form; but as regards the acids the doctor speaks of, they are neutralized in carron oil by the lime which may be in excess leaving it alkaline like the soda solution. I have had several cases that were very successful in which I used boracic acid—a five per cent solution of boracic acid applied with small pieces of protective silk placed like shingles so the fluid may flow from under them. I have had excellent results from the use of carron oil. When I use this I apply no dressing to the parts. I don't think I have had a case of burn about the hand and face for three years where the patient was tractable enough to keep the hand still upon which I placed the dressings. A crust forms on the surface and healing goes on under it. I have had good results from the use of linseed oil and carbolic acid. Recently I had a case in which I used safaline and alkaline emulsion of pure paraphine.

Article XCIV.

MISSOURI STATE MEDICAL ASSOCIATION.

Twenty-fifth Annual Meeting, held at Brittingham Hall Hannibal Mo., May 16-17-18, 1882.

First Day. — Tuesday, May 16, 1882.

Evening Session.—The President Dr. W. P. King, of Sedalia, was introduced and then called the meeting to order. Rev. C. S. Savage offered a prayer and was followed by Hon. Rowe, Mayor of Hannibal, who made an address of welcome.

Dr. Clayton addressed the Association on behalf of the profession and citizens of Hannibal. Dr. King made a reply to these gentlemen and the business of the meeting began.

The minutes of the last meeting being adopted the Committee of Arrangements made its report, and a committe on credentials was appointed.

Dr. J.W.Trader, of Sedalia, read a paper on Railroad Surgery which was discussed by quite a number.

The report of the committee on publication followed and was adopted.

The committee on credentials reported 95 members enrolled and who had paid their fees. Immediately after reading the names, the Hannibal Medical Society protested against the admission of delegates from the Marion County Medical and Surgical Association. The whole matter was referred to the committee on credentials, and the report of that committee adopted with exception of names under charges.

Second Day.—Wednesday, May 17, 1882

Morning Session.—The meeting called to order at 9 o'clock and the matter in regard to the Marion County Medical and Surgical Association was declared wrongly referred to committee on credentials and then referred to the committee on ethics.

Dr. Allen, of Liberty, made a motion, which prevalied, that a vote of thanks be tendered to Dr. Rumbold for furnishing notes of discussions for proceedings of 1881.

On motion of Dr. F. A. Simmons, of St. Joseph, a committee of five was appointed to draft resolutions in regard to Dr.Hodgen's death. The committee consisted of Drs. Simmons, Hurt, Vaughn, Glasgow, Schauffler and Middlekamp.

The Secretary, Dr. Todd, of St. Louis, made a report in regard to corresponding with Medical Colleges in the matter of making a record of their examinations for the censorship of the Association.

The Treasurer Dr. Thompson, of Jefferson City, made a report which an auditing committee was ordered to examine.

Dr. P. V. Schenck, of St. Louis, read a paper on Phlegmasia Dolens, its treatment with Rubber Baudages and spoke of Vaginal Injections presenting a drawing of an instrument used in the Female Hospital of St. Louis.

On motion of Dr. Dickinson a telegram was ordered sent to the Illinois State Medical Society then in sesion at Quincy, Illinois.

Dr. T. J. Norris, of Macon, read a paper on the Organization of Local Medical Societies. After being discussed the ethical part was referred to the committee on ethics.

Dr. David Prince, of Jacksonville Ill., was made a member by invitation.

Dr. Dickinson, the corresponding secretary, made a report. The auditing committee's report was read and adopted. The amendment offered last year in regard to the order of business was carried.

Dr. King presented for inspection the walking stick of Dr. Ephraim McDowell.

AFTERNOON SESSION.—The Woman's Christian Temperance Union presented through its Secretary, Miss Phillips, a memorial which was referred.

A telegram from the Illinois State Medical Society was read.

Dr. J. P. Kingsley, of St. Louis, made a Report on Progress in Diseases of Children. After quite an animated discussion on this paper, Dr. King, of Sedalia, read the President's address, the subject being Quacks and Quackery in Missouri.

On motion of Dr. Allen, of Liberty, 2000 extra copies were ordered printed and distributed throughout the state, the paper to be so abbreviated or changed as deemed fit by the publication committee.

The committee on ethics made a report sustaining the protest of the Hannibal Medical Society. This led to a heated discussion and after an exciting session the report was adopted.

No evening session took place as the citizens and profession of Hannibal had provided a banquet and ball.

THIRD DAY.—THURSDAY, May 18, 1882.

MORNING SESSION.—Dr. A. W. McAlester, of Columbia, read a report on a case of Congenital Multilocular Fibro-Cystic Degeneration of the Thyroid Gland.

Dr. A. J. Steele, of St. Louis, of the committee on Orthopædic Surgery, presented a jacket for spinal caries and explained its method of construction. This was thoroughly discussed.

Dr. F. J. Lutz of St. Louis, read a paper on the same subject as Dr. McAlester's, it being a supplementary report.

Dr. C. H. Hughes, of St. Louis, read a paper on the Psychic Signs of Functional Neuratrophia or Neurasthenia. This paper was also well discussed.

Dr. Matthews, of Carthage, read a paper on Hydrophobia which elicited quite an animated discussion.

The committee on nominations was appointed and then it was decided to appoint the next place of meeting. Upon voting, it was decided that Jefferson City be the place.

Dr. Lutz spoke of the move made by the St. Louis Medical College Alumni to erect a monument to Dr. Hodgen.

AFTERNOON SESSION.—A letter from Dr. E. Montgomery, of St. Louis, asking the Association to repudiate the action of the New York State Medical Society, was read and referred to the publication committee.

The following resolutions in regard to the code of ethics were read and passed:

Resolved, That we view with regret the action of the Medical Society of the State of New York at its last annual meeting, in reference to the Code of Ethics, and hereby record our decided disapproval of said action and reassert our conviction of the importance and appropriateness of the present code of the American Medical Association for the guidance of physicians in their conduct towards each other and the public.

Resolved, That a copy of this resolution be presented at the meeting of the American Medical Association at St. Paul, and that it also be offered for publication to the medical journals of our State.

Dr. Miller, of Shelbyville, read a part of a letter of Dr. S. D. Gross in which he deplored the action of the New York State Society.

Dr. Norris' amendment that no one can be a delegate unless a member of a county medical society, provided there be one was tabled.

The committee on credentials made a completed report of delegates, the number having registered being 167.

The election of a President for 1882 was next in order and the balloting resulted in the election of Dr. A. E. Gore, of Paris.

Dr. W. C. Glasgow, of St. Louis, read a paper on Idiopathic Subacute Laryngitis, which was well discussed.

Dr. G. Hurt, of St. Louis, read on the Ratio of Mortality from Puerperal Causes.

Dr. Brooks, of Carthage, read some Notes on Vaccination and a few Inoculations. This was discussed also.

The committee to draft resolutions in memory of Dr. Hodgen reported the folowing which were ordered spread upon a memorial page of the transactions:

WHEREAS, This association is called to mourn the loss of one

of its members, Dr. John T. Hodgen, suddenly stricken by death in the very zenith of professional usefulness and success.

Resolved, That in Dr. Hodgen we recognized the true type of the American physician and surgeon and the noblest qualities of a great and good man. That with a reputation extending as far as the English language is spoken, he was yet pre-eminently one of the people, and that he had both endeared himself and improved his individuality upon the present generation of medical men of this country.

Resolved, That in the death of Dr. Hodgen not only has Missouri lost the truest and brightest light of her medical fraternity, but that our profession throughout the world must feel that in their ranks, too, a prince has fallen.

Resolved, That we shall ever cherish as an inspiration the memory of his untiring industry, his manifold acquirements, his rare modesty, his sympathetic nature, his general social qualities and the strength and symmmetry of his character and life, and that in keeping green the memory of our departed brother, we shall elevate and honor ourselves and the profession of our State.

Resolved, That in the death of Dr. Hodgen we feel that we have sustained an irreparable loss, and that we hereby tender to his bereaved family our sincere sympathy, and claim the privilege of mingling our sorrow with theirs in this hour of their sore bereavement.

DR. F. A. SIMMONS, Chairman,
DR. G. HURT,
DR. J. P. VAUGHAN,
DR. E. W. SCHAUFFLER,
DR. H. H. MIDDLEKAMP.

The committee on State Medicine made a report which was adopted.

It was moved that the President be requested to continue the same committee and it be authorized to present the resolutions to the next legislature.

The committee on medical education made a report through Dr. A. L. Teed. The report was tabled.

The committee on nominations made the following report which was adopted:

Vice-Presidents: Dr. P. French, Mexico; Dr. R. F. Brooks, Carthage; Dr. P. S. Fulkerson, Lexington; Dr. O. D. Fitzgerald, Lathrop; Dr. F. J. Lutz, St. Louis.

Recording Secretaries: Dr. C. A. Tood, St. Louis; Dr. J. H. Duncan, Columbia.

Corresponding Secretary: Dr. W. Dickinson, St. Louis.

Treasurer: Dr. C. L. Thompson, Jefferson City.

A telegram from the Mayor of Jefferson City was received and read.

EVENING SESSION.—A resolution of thanks was adopted in

which the physicians, citizens, hotels, press, railroads and steamboats were thanked for courtesies extended.

Dr. G. M. Dewey of Keytesville, read a highly humorous paper on the Use and Abuse of Quinine.

The discussion began when the President-elect was escorted to the chair and the standing committees for the coming year were read.

After this had been done the discussion was resumed and was soon terminated.

Dr. Warth, of Nevada, next read a paper on Placenta Prævia.

A discussion then arose as to the address of the Woman's Christian Temperance Union, and it was finally referred to a committee to report at the next meeting which is to report upon the effect of alcoholic liquors upon the human system.

The meeting then adjourned to meet at Jefferson City, on the third Tuesday of May, 1883.

A complete abstract of the papers and discussions of this meeting will be presented in future numbers of the JOURNAL.

The following firms had displays in the hall:

Parke, Davis & Co, Seabury and Johnson, and E. Lambert and Co. (Listerine). Wm. Bailey and A. Leslie & Co. were up with a full assortment of surgical instruments. The McIntosh Company of Chicago had batteries and uterine supporters on exhibition.

Article XCV.

ILLINOIS STATE MEDICAL SOCIETY.

Annual Meeting Held at the Court House, Quincy, Ill. May 16, 17 and 18, 1882.

First Day.—Morning Session.

The Society was called to order by the President, Dr. Boal, of Peoria. Rev. Newman Smith offered up a prayer and was followed by Dr. Jos. Robbins, of Quincy, who made an address of welcome.

Dr. Robert Boal, the president, delivered the annual address.

Afternoon Session.

After a number of gentlemen had been elected members by invitation, Dr. W. O. Ensign, of Rutland, made a report on Practice of Medicine, choosing for his subject, Vaccination, which was discussed at some length.

Dr. Lee, of Chicago, made a report on Surgery, Dr. E. F. Ingals, of Chicago, making a sub-report. These papers were discussed at some length, as were also the report on Obstetrics, by Dr. J. B. Davidson, of Moline, and the sub-report by Dr. Carr, of Carlinville, which latter was on the Resuscitation of Still-born Children.

Evening Session.

The discussion was resumed on the papers of Drs. Davidson and Carr.

Dr. E. S. Booth, of Sparta, of the committee on medical legislation, read a paper on Medical Education and Medical Legislation, and also the paper of Dr. M. A. McClelland, of Knoxville, on Medical Legislation. Dr. E. Ingalls, of Chicago, also read a paper on the same subject. After the discussion, Dr. Ingals submitted the report of the committee on Necrology, which was referred.

Second Day.—Morning Session.

The discussion on Medical Legislation was resumed.

Dr. E. W. Jenks, of Chicago, of the committee of Gynæcology, read a paper on Gynæcology, which elicited quite a discussion. Dr. Coles, of the same committee, made a sub-report.

AFTERNOON SESSION.

A volunteer paper by Dr. C. D. Hadway, on Muscular Paralysis in Children, was read by title.

Dr. A. E. Prince, chairman of the committee on ophthalmology and otology, made a report.

A message from the Missouri State Medical Association, in session at Hannibal, was read.

A paper on the Microbium of Malaria, by Dr. C. T. Reber, of Shelbyville, was referred by title.

The publication committee made a report.

The committee on nomination reported as follows:

President, Dr. A. T. Darrah, Tolona.

Vice-Presidents, Dr. L. G. Thompson, Lacon; Dr. W, A. Byrd, Quincy.

Treasurer, Dr. J. A. Hollister, Chicago.

Permanent Secretary, Dr. S. J. Jones, Chicago.

Assistant Secretary, Dr. T. M. McIlvain, Peoria.

Peoria was selected as the next place of meeting.

Dr. Mendenhall read a report on the Treatment of Diseases of Children, after being discussed by several members, Dr. Cook, of Mendota, opened the discussion of the question, Is Pneumonia a local Inflammation or a general Zymotic Fever? The next question was, What is the Modus Operandi of Antipyretics and their Therapeutic value in Fevers?

Eulogistic remarks and resolutions on the death of Dr. J. T. Hodgen were made.

During the evening a banquet was held at the Tremont House.

THIRD DAY.—MORNING SESSION.

Dr. Robbins read a paper on Hot Water Injections, and was followed by Dr. Ellen A. Ingersoll, of Canton, who read on Hydrocele in the Female.

Dr. E. W. Andrews of Chicago, chose for the subject of his paper, Phenic Acid in Cancer.

Dr. D. Hadwell's paper on Muscular Paralysis of Children was read by Dr. A. K. Van Horn, of Jerseyville, and an apparatus exhibited.

Dr. Wagner, of Quincy, read on Bovine Disease or what would you call it?

At the suggestion of Dr. Hollister, of Chicago, a committee was appointed to consider the desirability of issuing a biographical volume of the members.

Dr. Cook, of Mendota, brought up the law in regard to admissions to insane asylums. After considerable discussion the matter was referred to a committee.

AFTERNOON SESSION.

Delegates to the American Medical Association were named, as also delegates to various State medical societies.

A resolution of Dr. J. F. Durand, of Quincy, for Congress to establish a vaccine farm for the propagation of pure virus, met with a warm reception, and was rejected.

The usual vote of thanks was tendered to the committee of arrangements, physicians of Quincy, press, railroads and officers of the society.

The question of the Modus Operandi of Antipyretics was taken up, Dr. N. S. Davis, of Chicago, delivering the ablest and most interesting address of the meeting.

The Society adjourned to meet in Peoria, in May, 1883.

ARTICLE XCVI.

BLACK HILLS MEDICAL SOCIETY.

Deadwood, D. T., March 25, 1882.

Regular Meeting of the Black Hills Medical Society, held at the office of Dr. Houghton.

Present, Drs. J. Houghton, D. K. Dickenson, W. S. Dyer, Jos. Van Buskirk, J. C. O'Neall, B. B. Kelley, J. W. Freeman R. H. Perryman and M. C. Wyett, of U. S. A. Meeting called to order by the President, Dr. Houghton. Minutes of last meeting read and opproved.

On motion of Dr. Dickenson, rules were suspended, and Drs. J. W. Freeman and M. C. Wyett, of the Army, stationed at Fort Meade, were elected members of the Society. Dr. R. H. Perryman reported the circumstances of the death of Dr. H. M. Williams, of Central City, as follows:

March 22, about 4 P. M., he obtained from five to eight grs. of morphine of Mr. Bass (druggist) under false pretenses, and took about five grains. Bass and Ingals tried to administer five grs. sulphate zinc as emetic, but failed. When Dr. Williams left and went to Dr. Perryman's Drugstore, and called for two one-half gr. powders of morphine which were refused. While he stood insisting on getting morphine, Mr. Bass telephoned not to let him have morphine if he called for it. Mr. Bass came up with Dr. Gussolley in a few minutes and informed us that Williams had five grs. of morphine in him. We took him in the prescription room immediately, and gave him twenty grains.

pulv. ipecac. in warm water; he protested against it and did not want an antidote, said he would go to Deadwood and get more Morphine and take it.

In less that eight minutes we gave him twenty-four grs. more ipecac, having to hold him and pour it down; in ten or twelve minutes we gave him a teaspoonful of ground mustard in a cup of warm water; in ten or twelve minutes gave another teaspoonful of mustard in water and another cup of water, and fifteen minutes later gave two and one-half drachms of tincture lobelia. We passed a feather down his throat to induce vomiting. With all our efforts he did not vomit to exceed a teacupful. The greater part of this time we were unable to keep him awake. At this time Dr. Gussoling had sent for some atropia and gave it to him hypodermically; in a short time the pupils dilated, he became less drowsy and comparatively bright; a walk on the street was proposed, but after walking two or three hundred yards, he failed and was taken home. In a short time he was in a deep sleep and unconscious, without radial pulse.

At midnight, respiration ten to the minute, and pupils widely dilated, died between four and five o'clock A. M.

The report was ordered, placed on file, and the effects of poison taken and antidote given was discussed; wherein it appeared that two doses of atropin had been administered hypodermically, each containing one-fifth grain.

The President appointed Drs. D. K. Dickenson and J. W. Freeman, a committee to draft resolutions in relation to the death of Dr. H. M. Williams.

Dr. Kelley completed a report of a case in practice with post-mortem, and exhibited the pathological specimens, consisting of the gall-bladder and sections of diseased liver, gall-stones and concretions. On motion the article was ordered prepared for publication in ST. LOUIS MEDICAL AND SURGICAL JOURNAL,* together with report of the meeting of the society.

The society then resolved itself into a class on microscopy, under the direction of Dr. J. W. Freeman, who kindly permitted the use of his extensive collection of histological and pathological specimens for the use of the society.

The society then adjourned to meet in four weeks.

B. B. KELLEY, M. D, Secretary.

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*This paper will be published in our next issue. [Eds. JOURNAL.

Correspondence.

Article XCVII.

Should the Code of Medical Ethics be Altered or Amended so as to Permit and Sanction Consultations with Irregular Practitioners?

It seems to me that one argument alone should suffice to answer this question in the negative. It is acknowledged by all that the regular scientific inductive and progressive system of Medicine adopted and practiced by the so called Allopathic School is altogether and totally different from all the other narrow minded circumscribed and dogmatic systems. They are as wide apart as the poles, can have no congruity or congenialty of judgment or action; cannot benefit the patient and if entered into degrade and humiliate the conscientious physician.

If the physicians of the "old school" (I am opposed to the term Allopath) should approve or indorse the action of the New York State Medical Society, the scientific and progressive physician would be expected to fraternize, counsel and consult with Homœopaths, Eclectics, Thompsonians, Medical Electrics, Faith doctors *et id omne genus* which in my opinion would be degrading, disreputable and humiliating to the last degree. By avoiding all such absurd visionary and fanatic imbeciles we will uphold the dignity of our profession and publicly exhibit the soundness of our faith in progressive and scientific Medicine.

The Homœopathic doctrines of "*Similia Similibus Curantur*," the infinitesimal doses, the attenuations, triturations, and shakings to arouse and increase the potency of the preparations, can scarcely become the foundations of our faith as progressive and scientific physicians. The dogma of "like to like will cure" embodies the belief that as arsenic will produce a gastritis, therefore arsenic will cure it. Veratrum viride will give rise to debility and nausea, therefore veratrum viride will cure these indispositions. The Hudibrastic couplet,

> "Weapons dressed with salves restore
> And heal the wounds they made before."

seems to be faithfully adopted by the disciples of Hahnemann. With all their credulity and fanaticism the homœopaths could not avoid discovering that this doctrine of similars might often become dangerous and therefore they promulgated another dogma, that

of infinitesimal doses, supplemented with shaking and trituration. Although they still professed to believe that like to like will cure, that

"The hair from the dog that gave the bite,
When applied to the wound would cure it quite."
or
"Like the serpent's oil is said
To cure the wounds that vermin made."

they professed to believe that medicines which would produce fever, were the proper remedies to cure the fever but they took care to apply their curative agent in very infinitesimal doses. In order to present a clear conception of the dogma of infinitesimal doses as recommended and adopted by homœopathists, I will give the officinal formula for the thirtieth dilution, which Rau, Hempill and all recent homœopathic authorities say is the one most universally used.

If two drops of mixture of equal parts of alcohol and the recent juice of any medicinal plant be diluted with ninety-eight drops of alcohol in a vial capable of containing one hundred (for the convenience of *shaking*) and the whole to be *twice shaken, shaken together*, the medicine becomes exalted in energy to the first developement of power as or it may be denominated, the first potence. This process is to be continued through twenty-nine additional vials each of equal capacity as the first, and each containing ninety-nine drops of alcohol so that every successive vial from the first being furnished with one drop from the vial or dilution immediately preceding (which has been twice shaken) is in its turn to be shaken twice, remembering to number the dilution of each vial on the cork as the operation proceeds. These manipulations are to be continued through all the vials, twenty-nine additional, each of equal capacity with the first, and each containing ninety-nine drops of alcohol. This will be the decillioneth element of power which is the one in most general use.

Now this wonderful prescription of Hahnemann is endorsed and employed by the present homœopaths as Hempel one of recent writers on homœopathy says that if we want to get the very best homœopathic preparations we must carefully follow the rules laid down by Hahnemann. Now look at the preposterous absurdity of this exhibition of homœopothic therapeutics.

Hahnemann was not like McAuley's character of Lord Halifax, he was no "trimmer," he openly and fearlessly contended for the most extreme doctrines of his school; he declares that the best dose of the properly selected remedy is always the very smallest one, as well for acute as for chronic diseases. He also avers that this infinitesimal doctrine is the inestimable property of pure homœopathy which will forever separate it by an impassable gulf from all spurious systems. In the preparation

of granules or solid medicines the homœopathic method is to increase the potency or energy of the remedy by attenuation, (sugar in a mortar), this attenuation is accomplished by dissolving one grain and passing through twenty-seven vials the same way as the vegetable juices up to the thirtieth dilution. Of this very attenuated mixture small granules of sugar of the size of a small mustard seed are impregnated so that one granule will contain about a three hundredth part of a drop of the attenuated mixture; one grannle thus composed may be given as a dose but if the patient is weak, sensitive or very nervous, it will be safer to allow him to smell once!!

A homœopathic friend was kind enough to loan me some of his books, and it was really irksome and painful for me to read such absurd nonsense, twaddle and irrational theories as were there presented. The attenuated solutions are said to have their potency increased by shaking, and the homœopathic writers are very particular about the number of shakes, generally limited to two shakes, lest the potency of the remedy would be so great as to endanger the patient; and if the patient was very weak, or nervous one small one would be sufficient. We are not informed how the "*potential power*" is to be increased in medicines of the solid form, but presume it is to be accomplished by a vast amount of trituration. We see that this absurd and mystical science of medicine embraces at least three dogmas, the doctrine of similars, infinitesimal doses, and potential power. If "like to like" does not cure, but the remedy proves worse than the disease, the dogma of infinitestimal doses is appealed to; if the glaring absurdity of such extreme attenuation is made apparent, the dogma of "potential power" is enlisted, and this power and energy is imparted to the very attenuated remedy by shaking (two shakes to each dilution!!); and a vast amonnt of trituration! I would be extremely grieved if I should judge wrongfully, or allow my early education and training to lend me prejudice, or warp my judgment, but I cannot conceive how an educated physician can approve and practice homœopathy without being afflicted with great mental imbecility, or very lax morality. If a man is weak minded credulous or fanatical; or if he is controlled and guided by sordid or mercenary motives, the conscientious physician has no use for him, and should strenuously avoid all such entangling alliances.

As I have recently been reading a great deal of homœopathic literature, I hope I will not be accused of egotism or pretentiousness if I venture to give a homœopathic prescription for the diet of the patient. From what I have learned of the rationale and philosophy of homœopaths I think the following dietetic prescription will be recognized as in perfect accordance with homœopathic doctrine.

The pinions of one wing of the swallow, stewed or infused for three hours in a pint of boiling water, of this attenuated

nutritive soup put one drop and three drops of alcohol into a wineglass of water and drink for a dose; if the patient is young and robust, shake it twice before giving, but if the patient is sensitive or nervous it will be safer to give one smell!!!

Now I contend that this prescription is just as natural and reliable as the thirtieth delution of medicine. This attenuated soup will be as successful as a nutriment as the decillioneth development of power of medicine is curative in disease.

It will be seen that I have confined my criticisms and arguments principally against homœopathy, for the reason that heterodox system is the one with which we would be called upon to consult; for as long as we have so many hypochondriac, hysteric and imaginative people in the world, sordid and mercenary motives will cause many to assume the garb of homœopathy, so as to cater successfully to the hallucinations of the credulous and visionary patients.

The electics, the hydropathists, the medico-electrists, the steam and herb doctors, etc., have nearly all died out, but the nonsensical, absurd and ridiculous doctrines and practices of the disciples of Hahnemann, for the reason given may exist for many years to dupe their followers and create the contempt of all educated, intelligent and right minded citizens.

Let us avoid all entangling long alliances, let us make no compromise with error or fanaticism, let no sordid or mercenary motives induce us to countenance or patronise charlatanry or quackery. Let us act conscientiously and honorably, should the heavens fall.

EDWARD MONTGOMERY, M. D. St. Louis.

BURNT COFFEE AS A DISINFECTANT.

St. Louis, May, 1st. 1882.

EDITORS JOURNAL:

Burnt coffee as a disinfectant is just now receiving attention as a new disinfectant. I have used it for twenty-five years. My preceptor, Dr. James Thistle used it before me. During the war, I used it in hospitals and barracks. I once treated a lieutenant, in officers' quarters, sick with varioloid, without isolation, his removal not being desired. The disease did not spread. Coffee drinkers more seldom than milk drinkers have typhoid, etc. There is some value in roasted coffee.

C. H. HUGHES, M. D.

Clinical Reports from Dispensary Practice.

Article XCVIII.

Laryngeal Cases. By J. C. Mulhall, M. D., Physician to the Throat Department of the St. Louis Medical College Dispensary.

Dec. 23, 1881, Laura J., aged 22 years, complete aphonia two weeks, preceded for one week by slight hoarseness. Patient had already brought her syphilitic infant, and had contracted primary lesion eighteen months ago. Larynx presents general mild congestion of syphilitic hue, and at middle of vocal cords, implicating their free edges, two smoothly outlined, greyish yellow globular growths, of the size of a large pea with apices pointing inwards.

On adduction they come into contact and prevent phonative approximation of the cords. The aphonia is therefore mechanical. The laryngeal sound reveals general anesthesia of the larynx, an experience I have several times had in the investigation of laryngeal syphilis.

Ten grains of potassium iodide with one-tenth grain hyd. bichloride were ordered to be taken three times daily and at the end of ten days there was complete restoration of the voice and no trace of the growths could be found. This case is very unusual in the history of laryngeal syphilis. It is rare that gummata appear in the larynx, very rare that they select the true cords as sites of growth, very unusual that they should appear so early and be unaccompanied by other serious laryngeal lesion, and unusual that they should so rapidly fade under treatment.

Jan. 31, 1882, John B., aged 24 years, levee laborer. Two weeks ago from well recognized exposure caught cold, producing dry cough, hoarseness and aphonia, persistent to date. Chest normal. Mild congestion of supra-glottic larynx, active congestion of the cords, on the upper surface of each a well defined oval ulcer, of the size of a split pea and covered with ash-grey slough. On adduction, the lateral adductors are paretic, the central adductor (arytenoideus) paralyzed. The aphonia is therefore paralytic.

Active local and general treatment ordered Feb. 4, four days afterwards, the voice was quite restored, being only slightly hoarse. The ulcers are still present, but the cartilaginous edges of glottis now come completely into apposition. The aphonia

was therefore mostly dependent on paralysis of the arytenoids from local inflammation, partly on paresis of the lateral adductors. The ulcers afterwards healed leaving well defined scars.

The chief interest of the case lies in the fact that ulceration may accompany simple subacute laryngitis, however, a rare complication. There was no constitutional cause and treatment was non-specific. The ulceration was not the *erosions glandulaires* of the French authors.

Feb. 8, 1882, Wm. D., aged 27 years, laborer, came saying that he had taken cold three weeks ago, producing hoarseness and violent cough, that for the last two days with each fit of coughing, he spat up about a teaspoonful of blood.

Two years ago had typhoid fever, with hoarseness and slight hemoptysis. He also suffers from malaria.

General mild congestion of larynx. Looking into the trachea I could see bloody froth slowly trickling *downward*. On re-examining the larynx, I now discovered that the blood came from the vicinity of the inter-arytenoid fold, from what I took to be a ruptured varicose vein, as did also Dr. Friedman who carefully examined him. Chest healthy.

Opium for the violent cough, ergot and ice internally. The hemorrhage ceased at once and has not returned. The laryngoscope enabled me to give the patient the comforting assurance that the blood was not from his lungs. Want of space forbids an attempt at explanation of the presence of a varicose vein in the larynx, ruptured by violent coughing.

Clinical Reports from Private Practice.

Article XCIX.

Two Cases of High Temperature. Treatment by Cold Bath and Large Doses of Quinia. By Jos. L. Bauer, M. D., of St. Louis.

The case which I report is unique, not only in the height of temperature, but also in the rapidity with which the great bodily heat was reduced, and a safe if not a normal temperature restored. Physicians from all over the world have wrestled with this most alarming of all symptoms for many years, and it has been left to the last decade, to enforce a potent therapeutic regimen by which this problem has been brought to a near solution.

Although many physicians of independent thought and action have treated high fever by cold temperature, Liebermeister is undoubtedly the first, who has thoroughly systemetized the statistical results. His dissertation in "Ziemssen's Encyclopedia" embodies the cold treatment conjoined with large doses of quinia. In fact, we might say, that nearly all good observers and independent physicians have surrendered the hot room, fire, blankets, hot drinks and small doses of quinia, and are now numbered among the rationalists. But there are others who have *tried* Liebermeister(?) and have arrived at a negative conclusion. Others again, pander to the follies and superstitions of the laity, and would rather lose a patient by the old plan, than to risk the new, and the reputation upon which every physician's success in life depends. Even Prof. Austin Flint has at one time felt this, for, he says: "but as the measure was then a novelty in medical practice, I considered that I would be held responsible for any accidents that might subsequently take place."

During an active practice of eight years, I have met manifold cases of extreme pyrexia occurring in the exanthemata, pneumonia, typhoid and malarial fevers. Whilst I was imbued with the old notion of giving *small* doses of quinia, I, fortunately for my patients, recognized the great value which attached to the rapid reduction of temperature by means of *cold therapeutics*. Austin Flint expresses my thoughts in better language, when he says: "the most effective refrigerating measures which possess much potency, are external applications; and these are *cold water* and *cool air*." No one who has seen the immediate results which

obtain when you put a patient with a temperature of 103° to 105° Fahr. in a cold bath, will even fail to be convinced of its utility. Many physicians have become wedded to the cold pack; in the absence of suitable vehicles to administer the bath, this method is satisfactory; but it has its objections. Cold relieves the pain of the initiatory stage of pneumonia, the convulsions during the hyper-pyrexia of scarlet fever and measles. But, although I might be able to reduce the *temperature*, I could not keep it within safe limits without having my bath at instant command. And why was this? I had not learned by experience what had already been taught, that *antipyretic* and *large* doses of quinia were inseparable. And herein lies the whole difficulty; the *true Liebermeister treatment* implies, not 10 grains of quinia twice or thrice daily, not 20 grains morning and night, but 30, 40, 50 and even 60 grains within one, two or three hours. Not cold water of a temperature of from 60° to 70°, but 50° to 55° Fahr. The trouble with some medical men is, that they lack courage, and I must confess the same weakness when I first tried it. Thus, a physician of good ability, to whom I related one of my cases, was thunderstruck to think such a thing could be done. But, I must not monopolize space; therefore I will cite two clinical cases of interest.

Last January, I was requested to see the wife of a prominent jurist of this city. The patient had resided at one of our principle hotels, in a room with a stationary washstand, and from which large quantities of sewer effluvia were constantly emitted. She determined to visit her children at her country home, (having required fresh country air to maintain their youthful vigor) about ten miles from the city. The weather was cold and rainy and my patient thinly clad. The next morning she was attacked with sneezing, chill and fever which increased towards night. She received some medicine which acted on her bowels and reduced the fever somewhat. The next day I was summoned, and I discovered the following condition:

Temp. 105°.5; tongue dry with tendency to sordes; great thirst; pain in intercostal muscles and subscapularis of right side; slight bronchial catarrh, a little tympanites and some tenderness in the right iliac region. I had no time for reflection; one thing alone had to be done, and that quickly. I had taken a box of freshly made quinine pills (5 grs. each) with me, and administered three at once, and every hour three more, making forty-five grains in three hours. During the intervals the body was enveloped in a cold pack. In five or six hours (I cannot say positively) the temperature had reduced to normal. This maintained itself for about four hours, when a rise was noted; we did not allow it to go any higher, but gave our pills (fifteen grains) every two hours, and maintained the temperasure at 100° to 102° for the balance of her sickness—two weeks. As soon as the fever had subsided permanently, a powder of calomel and

carbon. of magnes. was administered as a cathartic. During this period menstruation set in and subsided without any morbid accompaniments. *Deafness* was nearly absolute, her attendants having to talk very close and loud to obtain an answer. Although there was no delirium or apparent unconsciousness during the sickness, my patient is thoroughly ignorant of anything that occurred during this time. Whilst convalescing, delirium and trembling set in, but soon subsided upon the administration of diuretics.

The other case was that of my own child, in which during the first stage, and upon the appearance of the eruption in an attack of scarlet fever, numerous convulsions occurred and presented signs of recurrence. At first, (during April) the hydrant water seemed to avail, but soon lost its refrigerant effect. I sent for some ice, placed it in the water, and reduced the temperature to such an extent, that my hands suffered from the cold. The child was hardly in the bath ten seconds, when the convulsions ceased and the temperature reduced. The eruption disappeared each time, but reappeared after envelopment in a warm blanket. No accident occurred, and the child made a good recovery.

Reports on Recent Progess in Medicine.

Article C.

Report on Surgery. [Prepared for the Journal.] By R. W. Wilcox, M. D. of Vienna, Austria.

Tetanie.—The patient, a young man of about eighteen presented himself with a contusion of no great importance, of the left great toe. During the first day after his admission he complained of repeated cramps in his arms which lasted some minutes. On investigation it was found that in a few minutes, generally less than three, after compression of the brachial artery, the patient would complain of numbness, slight dull pain in his fore-arm and hand and then rigidity would set in. The elbow would be bent, the arm adducted the hand somewhat flexed at the wrist, while the fingers and thumb would be strongly flexed. While this condition persisted there was an entire loss of sensibility in the parts affected and the hand and arm felt hard to the touch. On relaxing the compression of the artery the rigidity disappeared, some sensations of uncomfortableness were complained of, but otherwise the sensations were normal. During the first few days the contractions could be produced by simply raising the arm but later it became necessary to compress the artery. Slight tapping over the *pes anserinus* would be followed by twitching and contraction of facial muscles supplied by it. At last these phenomena had so far disappeared that compression of the whole arm by means of an elastic bandage had to be resorted to before they would appear. An attempt to discover how far the loss of sensibility extended towards the body and whether it ended abruptly was made but in the process of uncovering the arm the manifestation disappeared. The foot was well at the end of three weeks. During the time that the patient was under observation there existed no other disturbances in any of his functions.

Certainly these phenomena could not be attributed to tetanus because they were peripheral in their origin and moving towards the center and even in the seven cases that have been reported contraction of the masseters was the last to take place; further therewas no great increase in the reflex irritability which is so characteristic of tetanus. Again it is claimed that in no other disease of the nervous system, nor even in health are the above mentioned facial phenomena seen. In looking over the literature of the subject one finds a few fatal cases,

where frequently repeated and long continued attacks followed by death through inteference with the respiration. The general prognosis however, considering the now quite numerous cases, is very favorable, the manifestations becoming less frequent and then ceasing altogether, rarely calling for any treatment.

CARBOLIC MARASMUS.—In a recently published article the statement was made that after a certain hospital assistant had been exposed for two hours to a two and a half per cent. spray of carbolic acid, during the next twenty four hours something over two grams of carbolic acid was detected in his urine. The symptoms of carbolic marasmus, as given, were slight headache, throat irritation, languor and lessened appetite, or if the exposure were longer there followed permanent irritation of the throat painful sensations in the loins, slow abdominal circulation, itching of the skin, sleeplessness, pallor, etc. A well known professor of surgery in commenting on this paper remarks that the amount of carbolic acid found in the urine was some fourteen times as large as the maximum dose allowed by the Pharmacopea As to the marasmus he remarks that the symptoms might signify neurasthenia but immediately enquires what sort of a neurasthenia it is when the symptoms disappear after a brisk walk and the color of the countenance is regained when one leaves the clinic for a few days. Probably, then, carbolic marasmus will not figure in the list of diseases for some time yet.

IODOFORM POISONING.—In the recent literature come two more reported cases which proved fatal, these will be briefly recapitulated. A man sixty-two years old, with tumor albus of the right knee, had the abscess incised and scraped out, an ordinary iodoform dressing of about twenty grams was applied, the dressing was changed on the fourth and eighth days, about ten grams more being used at each time, making forty grams in all. After the last dressing began symptoms of meningitis. The iodoform dressing was abandoned but the patient became rapidly worse and died on the twelfth day. At the autopsy the pia water was found cloudy, moist and injected especially at the base but separable from the brain. Lateral ventricles widened and containing rather more than the normal quantity of clean serum; ependyma clear and transparent. Brain somewhat hyperæmic and rather moist but not markedly altered. The spleen was enormously,enlarged,the liver somewhat larger than normal hyperæmic and slightly cloudy. Sepsis, with an almost normal, temperature is not to be considered while tetanus and delirium tremens can not be assumed because of the absence of any symptoms. The changes in the brain being relatively insignificant there seems to be left only iodoform as the cause of death.

The other case was an amputation of the right breast with removal of the right axillary gland for carcinoma, in a woman

fifty-eight years old. Here only six grams of iodoform was used altogether.

Three days after the operation the patient became apathetic and on the next day the iodoform dressing was abandoned. The patient had substantially symptoms of meningitis and died on the twenty-third day. At the *post mortem* it was found that the pia mater was strongly injected and moist, the right lung compressed by a pleuritic exudation, metastatic cancer in costal pleuro, diaphragm, liver and left axilla. Liver somewhat fatty heart muscles brittle, kidneys small, cloudy, the right kidney being filled with miliary abscesses. It was considered that sepsis and uræmia were excluded by the character of the symptoms and meningitis certainly was not shown by the result of the *post mortem* examination, The amount of iodoform used was certainly small enough to satisfy even the most careful of surgeons. Indeed the conclusion seems to be, that iodoform is to be used with the utmost caution and even then unexpected results may occur.

RESECTION OF THE DURA MATER.—Through the courtesy of Professor Czerny, the writer had the opportunity of seeing two cases. The first that of a young woman operated on last November for a bone sarcoma involving the anterior fourth of the parietal on the left side and some of the adjacent portions of the frontal and extending nearly to the sagittal suture. When the area of bone was removed it was found that the tumor involved a small portion of the dura mater, the affected piece was removed and the haemorrhage checked by the thermo-cautery. The patient made a good recovery. At the time she was seen the pulsations of the brain, much more marked on deep inspiration or on coughing, could be distinctly felt. She complained of slight headache and that she could not see quite so plainly with the left eye, but nothing was found on ophthalmoscopic examination.

The second case was that of an old woman with epithelioma covering almost the whole of the left half of the forehead, who was operated on last January. The tumor involved the underlying bone as well as a portion of the dura mater some three or four centimeters in diameter, hæmorrhage in this case also checked by the thermo-cautery. As the disease had been so extensive it was necessary to bring forward a flap of skin from above the ear to cover the exposed brain. When the patient was last seen the place from which the flap was removed was granulating nicely, the operation wound was healed except a small portion the size of a centimeter square in the upper edge of the wound where, probably, there was a bit of necrobic bone. The patient was in excellent condition. Here also when the patient coughed there was considerable bulging of the skin over the place from which the bone had been removed and even in quiet respiration the pulsations of the brain were plainly visible.

ARTICLE CI.

REPORT ON DERMATOLOGY. By A. H. OHMANN-DUMESNIL, A. M., M. D., of St. Louis.

CONTAGIOUS ECTHYMA.—Dr. F. S. Ranking in reference to the recent observations of Du Castel on the occurence of contagious ecthyma gives the the notes of ten cases (*Practitioner* April 1882), in which the first three, two brothers and a sister, were attacked simultaneously. Case four was the author's child who was a constant playmate of the affected children. The next case was the child's mother, who had attended it. The next two cases were a brother and sister, the former working in a factory in the neighborhood; the latter contracting it from him.

The other three cases were children of the same family, living at a distance—80 miles. The author himself thinks that Bamberger is correct in saying that ammonia in the blood is a cause for this eruption.

The true cases of contagion he believes to be Nos. four and five. He is also in some doubt whether the cases may not prove to be a contagious form of pemphigus. The symptoms appeared to commence on the chest, as bullæ of varying size, the contents remaining clear for a few hours, and becoming distinctly purulent in the course of twenty-four hours. The bullæ bursting or being opened, left a vividly red part of the skin slightly weeping —no ulceration; the redness of skin remained some months, or led in some cases to pigmentation of the site of the bulla.

INFLUENCE OF THE NERVOUS SYSTEM ON PATHOLOGICAL CHANGES OF THE SKIN.—Dr. A. Irsai, of Budapesth, has made a series of experiments on dogs to determine this question and arrives at the following conclusions (*Centralblatt für Nerven h. k. etc.*, March 15, 1882.):

1. One-sided traumatism of the spinal cord brings on marked paralysis but no skin lesion.
2. A few days after the injury, when inflammation has commenced, an eruption of herpes shows itself on the same side.
3. This eruption soon disappears.
4. Simultaneously with the herpes appeared a sclerosis of the skin.

The author believes that the anterior horns of the cord must be affected, not to mention other unknown factors, in order to bring about nutritive dermatoses.

TREATMENT OF WINE-MARK BY ELECTROLYSIS.—Dr. George Henry Fox read a paper in February before the New York State Medical Society treating of this subject and reproduced in the

Archives of Medicine, April, 1882. The object aimed at in electrolysis, scarification and puncture, is to excite sufficient inflammation to destroy the fine net-work of blood-vessels. The operation is similar that employed by the same author for the permanent removal of hair. A single needle or an instrument holding a number is attached to the negative cord of a constant current battery. There is little pain experienced and but slight injury to the skin. In about three weeks the effect becomes manifest, although it may be so slight as to necessitate a repetition of the operation.

As objections to the method are mentioned that it is tedious and painful. There is a slight danger of causing suppuration and superficial sloughing of the skin.

The author concludes as follows: As a summary of my experience I may state briefly that wine-mark is not as is commonly imagined, beyond the reach of surgical skill; that the most unsightly and disfiguring cases can be greatly improved if not entirely removed; that in few if any cases can the work be taken away without leaving faint scars, or, at least, a change in the character of the skin; that electrolysis, in my judgment, furnishes the best means of treatment, and that it is especially adapted to these cases in which the mark is more or less venous in character and of a dark purplish color.

AURICULAR GROWTHS.—Wm. Allen writes to the Dublin *Journal of Medical Science*, and reproduced in the *Medical and Surgical Reporter*. The following interesting case came under my care in 1882: B. Bahoo, aged sixteen years, presented himself for admission into the Victoria Hospital, in order that he might receive surgical treatment for two large auricular growths. Through an interpreter the following was obtained: He had his ears pierced for earrings when eight years of age. Shortly after the operation the tumors appeared, and when examined had attained the following proportions: The right tumor attached to the lobules of the ear, and having cutaneous attachments to the parotid and mastoid regions, measured from above downward nine inches, and in circumference fourteen inches; lobulated, hard and firm to the feel. The left tumor, smaller than the right, and having a somewhat similar attachment, measured from above downward nine inches, and ten inches in circumference. A small portion of the posterior inferior part of this tumor exhibited leucoderma, while the anterior inferior end of the right tumor showed signs of commencing degeneration. After placing him for a few days on preparatory treatment, I ligatured the base of the right tumor with some little difficulty; the first ligature though strong, giving way. The nutritive supply of the tumor having been interfered with, I dissected it off from its attachments, removing a portion of the ear and surrounding tissue, to prevent if possible, a recurrence of the growth; weight on removal, two pounds twelve ounces. I repeated the

same operation with the left tumor, but passed a double ligature through the centre of the pedicle, on account of its size, tying it anteriorly and posteriorly; weight on removal, one pound

Fig. 10.

Case of Auricular Growths.*

twelve ounces. There was a fair amount of arterial hemorrhage, on account of the arteries supplying the tumors being unable to contract. Pressure on the common carotid and torsion were of service. The after treatment consisted of rest and a pill containing opium and quinine. The parts are washed daily with carbolic acid lotion, and afterwards dressed with zinc ointment. No glandular enlargement existed at any time. The growths are probably of a fibro-plastic nature.

URTICARIA.—Rhoé has found a lotion of a drachm of benzoic acid to a pint of water the best antipruritic. Labbée lauds highly the arseniate of sodium, in full doses, internally, in chronic urticaria.

HYPERIDROSIS.—Dr. T. H. Currie writes to the *Michigan Medical News*, that he has a remedy good for excessive sweating from whatever cause (?). It is as follows:

℞ Alcoholis Oj.
Quinia Sulphat. ℥j.

S. Wet a small sponge with it and bathe the body and limbs, a small surface at a time.

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* We are indebted to the kindness of Dr. Brinton, editor of the *Medical and Surgical Reporter* for this cut.

Editorial.

Article. CII.

OUR STATE MEDICAL ASSOCIATION.

The last meeting held in Hannibal was a success in point of numbers, it being the best attended for years. But unfortunately we cannot compare with other States in point of work. There is too much time devoted to trivial and unimportant matters and not enough to important and scientific ones. The smallest thing cannot be done without being attended by lengthy discussions from those who have spent no thought upon the subject. Committee work amounts to nothing, whereas in all well organized bodies all the work is done in committee.

Local quarrels should be left out of the body, and after a committee makes a report which has taken perhaps months to elaborate, it should be reviewed without debate, especially when the matter is one of but little importance. Had this been done, the disgraceful scenes at Hannibal would have been avoided.

There is another thing which will tend to discourage *the workers*. Many were present anxious to do something in the way of shaping legislation for the coming meeting of the legislature, and not an effort was made. It would have been useless as a lengthy debate would have followed and the resolution would, doubtless, have been tabled.

Again, some were anxious to have the Constitution so amended as to have a permanent membership established, instead of one changing each year. If such a measure had been adopted, the Association would soon count a membership running into the thousands.

We wish Missouri to compare favorably with her sister States, and to do this we want every one to help and not be restrained and bound down by narrow interests.

The Constitution of the Missouri Medical Association should be so changed as to permit all the time to be devoted to the reading and discussion of papers and committees so arranged as to permit them to transact all the necessary business without interfering with the true purpose of the meeting.

Members are becoming more and more dissatisfied each year, and if things continue in the present course, it will not be many years ere this Association will be numbered among the things of the past and will go to a merited oblivion

"Unwept, unhonored and unsung."

In Memoriam.

Article CIII.

JOHN T. HODGEN, M. D., LL. D.

ST. LOUIS MEDICAL SOCIETY.

The following tribute to the memory of Dr. John T. Hodgen was made by the St. Louis Medical Society, May, 6th. 1882.

Dr. Wm. Dickinson, the President, made the prefatory remarks as follows:

Within a brief space, from the fields of literature, poetry, philosophy and science death, The Great Reaper, has gathering a rich harvest. Darwin, Longfellow, Emerson, Pancoast and Hodgen have finished their labors and entered into rest!

On the evening of April 28th an event transpired in Concord Mass. which cast a gloom over, not only an immense circle of acquaintances and friends in that vicinity, but throughout the entire republic of letters; for Ralph Waldo Emerson had just died. And on the 30th., an assembly of thousands convened from city, town and hamlet to pay their last tribute of respect to the memory of the poet and the philospher.

By a notable coincidence, at the same hour of the same day, in this city, a great luminary in the scientific firmament was extinguished; and at the same hour of the same quiet Sabbath and on a like occasion as the former, was enacted a scene without a precedent in the history of St. Louis. An unnumbered multitude, moved by a common impulse, assembled to honor departed worth and to testify its participation in the common bereavementby the death of Dr. Jno. T. Hodgen.

The death of the aged, infirm in body and mind, excites no surprise, for nature has so ordained; but in the presence of this event, which has fallen like the thunder-bolt from a serene sky, which has prostrated and borne away a brother, just in the vigor and maturity of manhood, in the ripeness of his experience, in the midst of a wide and constantly extending domain of usefulness, we stand amazed—appalled. That such a man should be thus snatched away,

> "Nor Gabriel asks the reason why;
> Nor God the reason gives—
> Nor dares the fav'rite angel pry
> Between the folded leaves."

In one short day Death did his destined work. Sorrow shrinks from publicity—tears seek solitude—therefore, convened in these retired precincts, sacred to science it is meet for us, as a medical household to indulge in demonstrations befitting the hour and place.

Upon this society falls this event with unwonted heaviness—a brother singularly honored has fallen—another seat is vacant—another voice is hushed; that voice to which for years we have listened ever with interest and profit: for he never spake that he did not instruct, never discussed a subject that he did not adorn.

The death of other associates worthy and respected, whom we regarded as bright lights in our profession, we have commemorated and have felt the inadequacy of words to express our sentiments of appreciation of the loss sustained; what measured periods, then, shall we now invoke in which to invest our sense of the deep pall which has come down upon us like night, when a *sun* is stricken from our social system.

It was said of Emerson, "he was not voluminous but he was comprehensive; and the subject, that once passed through his hands, however briefly, was exhausted." With equal fidelity to truth may the same eulogium be prononnced of our departed friend, whose closing history was so similar in circumstance and simultaneous in time.

As the rays from some remote fixed star, familiar to the eye, if *itself* were suddenly annihilated by the fiat of the Almighty, would *still* for years continue to reach the eye of the beholder, so, though death has removed his visible presence, will the memory of our friend and associate abide with us for years yet to come.

Mr. President:

In the noon of life, surrounded by hosts of friends and admirers, while in the active discharge of duty and with a fair promise of many additional years, almost without warning, death has stricken our honored leader, devoted counselor and friend. With hearts bowed down in the presence of a great bereavement we inscribe this tribute to the memory of JOHN THOMPSON HODGEN, M. D., who was born near Hodgensville, Hardin county, Ky., January 17, 1826, and died at St. Louis, Mo., April 28, 1882, aged fifty-six years, three months and eleven days. On the paternal side he was of German and French extraction, while English and Scotch blood was derived from the mother. The father, Jacob Hodgen, married Frances Parke Brown. He was an elder in the Reformed Church, and removed with his family from Hardin county, Ky., in April, 1833, to Jacksonville, Ill., and in June following located in Highland, Pike county, till January, 1838, when, in order to obtain greater advantages of education for his children, he settled permanently in Pittsfield, of the same county and State.

At the age of nineteen years the subject of this memoir was sent to Bethany College, Virginia, and remained one year, when he returned to the paternalro of and commenced the study of medicine with Dr. Worthington, of that vicinity. He matriculated at the Medical Department of the Missouri State University in the fall of 1846, and graduated from the same institution in March, 1848. At once he became an assistant resident physician of the St. Louis City Hospital, in which capacity he continued for a year, and leaving, emigrated to the then newly discovered gold fields of California, when, after a few months, he returned to Pittsfieldand commenced the active duties of his profession. He was fortunate in almost immediately successfully performing several capital surgical operations, and finding the place a pent-up Utica, confining the aspirations of his genius, he returned to this city and was immediately appointed Demonstrator of Anatomy in his alma mater. In 1851 he was made Adjunct Professor of Anatomy and soon thereafter elected to the chair of physiology. Discharging with great ability the requirements of this position he was next made Professor of Anatomy and held the chair with honor until the spring of 1862, when, from causes growing out of the late war, the college suspended. Having demonstrated the possession of superior qualities as a lecturer, he was not permitted to pursue a quiet life, but was elected to the chair of Physiology and Medical Jurisprudence in the St. Louis Medical College September 15, 1862, and was transferred January 20, 1868, to that of Anatomy, Military Surgery and Clinical Surgery at the City Hospital. This professorship was afterwards designated as that of Surgical Anatomy, Special Fractures and Dislocations and Clinical Surgery at City Hospital. During the recent civil war he rendered efficient service as Surgeon-in-Chief of the Fifth Street Hospital, and was afterwards appointed Surgeon-General of the State. He was elected a member of the St. Louis Medical Society August 21, 1858; became its treasurer in 1859, was elected vice-president in 1861 and president in 1870. He served also as president of the American Medical Association in 1881.

He married Elizabeth D. Mudd—a lady of Polish extraction, whose family settled in Maryland at the advent of Lord Baltimore, and who survives him with two of the four sons borne to them. For thirteen years he was associated in practice with Dr. E. S. Frazer and afterward with his nephew, Dr. H. H. Mudd, who is the surviving partner.

His was a mind comprehensive, discriminating and profoundly concentrative. Equal to every emergency he triumphed over obstacles most formidable. Extensive observation with vast experience inspired his creative memory, which ever evolved original thought, new methods and admirable instrumental inventions. Laboriously he absorbed the ideas of others only to discriminatingly accept the true and reject the false. With him the greatness of an author was no shield of protection, barring

close scrutiny and forbidding just censure, but with characteristic justice he awarded praise wherever it was due, and denounced error wherever found. Conscientious in the highest degree, the actuating principle of his life was the complete discharge of duty. Indefatigably he labored for the welfare of his fellow-man and the glory of his profession. To alleviate the sufferings of afflicted humanity was the prompting of his nature, nor was his conduct influenced by social or monetary considerations, for with equal energy, industry and ability he ministered alike to rich and poor, to high and low. Like Divinity he was no respecter of persons. Acknowledging the universal brotherhood of man, his charity and works were limited only by his mental capacity and physical endurance. He was untiring in his efforts to advance the standard of scientific medicine—to add additional honor and glory to his beloved profession. Of all men the least self-seeking, he shone brightest and was happiest in the reflected light of brilliant professional achievements.

His was "the art of being and doing good." This exemplified his religious faith. His life illustrated the noble sentiment, whether in the domestic circle, surrounded by a loving wife and affectionate children, or in the midst of professional brethren; in the wards of the hospitals, by the lowly cot of the laborer, with the lordly master of the mansion, at the lecturing-desk, or wherever placed, to be or to do good was his object.

For him there was no rest but in the grave. Loving labor, and endowed with unusual physical strength and activity, backed by extraordinary reserve forces, he successfully accomplished the herculean tasks incident to a practice commensurate with his extended reputation. And if he sought relief from the arduous routine of professional obligations, it was on the floor of some distant State, National or International Medical Congress, where he revelled in the society of professional brethren and indulged in the exchange of scientific thought. Tenacity of purpose characterized him. Convinced of the justice and truth of a position, his persistence till favorable conclusions crowned his efforts was unflagging. To an honorable antagonist he was as courteous as a knight of old. Vigorous, incisive, courageous, yet cautious, asking and giving no quarter, he was a foeman worthy of any man's steel.

From Joseph Nash McDowell, the first great surgeon of the Mississippi Valley, he obtained his knowledge of anatomy and surgery. Beloved by his preceptor, who from the first discerned his genius and predicted his greatness, he was early entrusted with mighty professional responsibilities. From this grand source he drew primarily his inspiration. Later he was connected with Charles A. Pope, then in the zenith of his glory and justly regarded as the foremost surgeon of the West. Death claimed both McDowell and Pope and the mantel of their greatness fell upon the worthy shoulders of their student, colleague

and companion. At once he came to the front an embodiment of the genious of the formerand grandeur of the latter engrafted upon his native stock of admirable qualities and gigantic attainments.

With a mind filled to repletion with massive thought and intent upon the faithful discharge of onerous duties, he was chary of words and dispatched business affairs with a promptness, which in those who met him, casually created a suspicion of abruptness, an error of judgment patent to his intimate friends, who in his relaxation, basked in the sunshine of his kindly eyes and revelled in the flow of his wit and wisdom. To his fostering care and administrative ability a great school of medicine owes much of its reputation. As Dean of its Faculty he originated and consummated measures for its establishment upon a broader basis of learning. His colleagues feel his departure with emotions akin to despair. He was the driving-wheel of the institution, and till Providence provides a successor, the spirit of the departed leader alone can control and direct. As a teacher of surgery he was incomparable. Estimating accurately the capacity of his class he delivered in condensed form the practical instruction which was impressed most durably, and throughout the great West his success is manifest in the labors of many surgeons who deplore his untimely death, commingling their tears with ours.

In consultation he was a safe counsellor and reliable friend. True to his guild he protected the younger and less experienced practitioner, and while indicating the path of safety, wounded no tender sensibility, sought no unfair advantage, but cheered his brother in the faithful performance of duty and left him more secure in the confidence of his patient and with heightened respect and love for the great surgeon. The rich fruitage of his arduous labors was being garnered. Honors were clustering thick about him and reputation as surgeon, scientist, lecturer and citizen was broadening. Grand enterprises in hand and soon to be consummated promised cosmopolitan fame. Already wherever the English tongue is spoken he had become a surgical authority. A few years more of life and he would have inscribed his name on the pinnacle of fame with those which were not born to die. The memory of his good deeds and grand achievements we cherish in our heart of hearts.

With this tribute, tendering our sincere condolence to the bereaved family, we follow the body of our friend to its resting place in beautiful Bellefontaine, and as we return from the sad mission and resume the burden of our daily toil, it is with a firm resolve to emulate his illustrious example.

CHAS. W. STEVENS, M. D.,
LE GRAND ATWOOD, M. D.,
THOS. F. RUMBOLD, M. D.,
S. POLLAK, M. D.,
G. HURT, M. D.,
Committee.

also by his election to the high honor of President of the American Medical Association.

The medical profession of the city of St. Louis, assembled to bear testimony to his qualities of mind and heart, the mere recital of which is his best eulogy, feel that the memory of his life-long service in cultivating science, the duties, the humanities of the healing art will be the guiding example of the disciples and colleagues who now mourn his untimely death.

LEGRAND ATWOOD, M. D.,
CHAS. W. STEVENS, M. D.,
G. BAUMGARTEN, M. D.,
WILLIAM DICKINSON, M. D.
ELSWORTH F. SMITH, M. D.,
Committee.

ALUMNI OF ST. LOUIS MEDICAL COLLEGE.

The Alumni of the St. Louis Medical College, called together to consider the death of Prof. John T. Hodgen, mournfully make this memorial record.

His brief, painful illness and sudden death have stricken us with an inexpressible sorrow.

He is cut off in the midst of a brilliant and useful career as a successful surgeon and teacher. He was the pride of the school, as his fame was the glory of our profession. We loved him for his goodness and greatness.

His consistent character charmed us equally with his skill.

Often tried in medical council, he was never found wanting in helpful aid, and no operative emergency ever found him lacking in resources of expedients to the fullest measure of human skill.

His life was a constant lesson to us all of the essentials to professional success, the embodiment of the persevering industry, steady and honest purpose, unostentatious and truthful endeavor.

The cosmopolitan fame he had already won by these virtues at the comparatively early age of fifty-six years, in defiance of many obstacles, had led us to look hopefully to a still more glorious future.

As a laborer in the profession, he was indefatigable and always effective. "Whatever his hand found to do, he did it with his might."

As a teacher he was exceptionally concise, practical and impressive; as a man and a friend he was plain, sincere and true.

In his untimely death, notwithstanding what he has already contributed to surgery, we have met with an irreparable loss and we share in the common professional and popular sorrow.

The family of the deceased have our profoundest sympathy in the dark hour of their deep affliction, and the Faculty our condolence in their great loss.

PHYSICIANS OF ST. LOUIS.

The following is the memorial of the profession of St. Louis:

In the death of Dr. John T. Hodgen, the medical profession of St. Louis and of the Mississippi valley mourns the loss of its best man. A man absolutely honest, of a most delicate sense of honor, loyal to the highest conceptions of duty, just and generous to all men, untiring in doing good to all who would permit him to serve them, loving and tender as none could guess until they had personal experience of his goodness; thoughtful and delicate in his manner of serving others, that he might at once render the most effective service and avoid the impression of obligation incurred; wise as they only are wise who make their acquisitions in knowledge a part of their own being; ready and prompt to act in the presence of the most unexpected complications; strong in his own well-grounded convictions; yet ever open to receive new suggestions; a man preeminently of actions rather than words, and performing always more than he promised, Dr. Hodgen combined qualities which go to make up the best type of manhood and which won for him a love and respect which grew with knowledge of him and with the accumulated experience of benefits at his hands.

A graduate of the Medical Department of the University of the State of Missouri, he at once became assistant resident physician to the City Hospital, and filled successively positions in his alma mater as a teacher in the fields of anatomy and physiology. Upon the suspension of the college at the beginning of the civil war he was called to the chair of Physiology in the St. Louis Medical College, and was assigned the duties of Dean of the Faculty, an office which he fill up to the day of his death. Later he was appointed to the chair of Anatomy, and was appointed still later to the chair of Surgical Anatomy and Fractures and Dislocations. From his first connection with the college he filled also the position of Professor of Clinical Surgery at the City Hospital.

As an instructor, the influence for good which he exerted upon the minds and in the professional training of the alumni of this school is incalculable; as a member of the faculty, his persevering and steady advocacy of advance in the direction of more perfect teaching has been a chief agency in making such advance possible.

With the outbreak of the civil war new fields of activity opened before him as advisory surgeon to the Western Sanitary Commission, as Surgeon in charge, of the Fifth Street Hospital, and as Surgeon-General of the State of Missiouri.

From the duties of these positions, actively pursued until the close of the war, he emerged as the trained surgeon, destined soon to assume a rank among the first in the land, as was attested

Though we shall never see his like again, his memory will abide long in our hearts as that of a man of wise and prudent councils, of few but weighty, kind and timely words and many great and noble deeds.

He has left an ineffaceable impress of his professional and moral worth, incellectual strength and personal character—consistent, perfect, complete.

In the shadow of so great a bereavement we can only record the greatness of our loss. We cannot now attempt to recount his many noble deeds and great achievements. It is too soon after the death of our friend to count the jewels he has left us and the profession, but they will shine brightly for all time and illumine the pathway of those who come after us, as they brighten the way of those whom he now leaves behind him. He lived and labored for all time.

C. H. HUGHES, M. D.
CHAS. V. F. LUDWIG, M. D.
M. A. MCCANDLESS, M. D.
Committee.

SOUTHERN ILLINOIS MEDICAL ASSOCIATION.

At the Annual Meeting of the "Southern Illinois Medical Association," held at Carbondale, Jackson Co., Ill., May 17 and 18, 1882, Dr. L. Dyer, of DuQuoin, committee on necrology, presented the subjoined paper on the death of Dr. Hodgen, of St. Louis, as a tribute of his exalted character, and the affectionate remembrance in which his name will be held.

The Secretary was instructed to send a copy of the same to the family of the deceased, with the assurance of our deepest sympathy, in this their great sorrow.

Copies were also ordered sent for publication to the ST. LOUIS MEDICAL AND SURGICAL JOURNAL and the *St. Louis Courier of Medicine.*

Mr. President, It has been often said that death loves a shining mark. Certain it is, that when Dr. John T. Hodgen died, a brilliant star went out—a star that had added extraordinary lustre to the galaxy of distinguished American physicians whose names are inscribed upon the scroll of fame.

To know him as we knew him was to love him and to honor him, as friend, companion and brother. To listen to him as we have often done, whether in the lecture-room or on the platform, as words of wisdom flowed from his eloquent lips, was to drink them in and be both charmed ane profited thereby.

As an honorary and corresponding member of the Southern Illinois Medical Association, we deeply mourn his death and miss him here, as he will be mourned and missed everywhere; but we shall meet him and greet him never, never more.

Dr. Hodgen died at his home in St. Louis, on the evening of

April 28, 1882, in the full noontide of his professional career. We, and the people at large, bow down under a profound sense of the great loss we have sustained.

Possessing as he did, a high order of genius, a comprehensive and well-balanced mind, exact in his knowledge of medical science, of disease, conservative, judicious and skillful as a surgeon, it is no wonder the practitioners of many years, no less than the younger members of the profession, recognized in him the master mind, the safe counselor and successful operator.

Strictly observing the ethics and amenities of professional and social life, with an enviable reputation abroad as well as at home, he was always approachable, artless, modest and unselfish. He was a made man, and the "friend of humanity." Right and justice were his guiding star.

Mr. President and Gentlemen, let us strive to imitate and emulate the virtues and the excellencies of this distinguished man, remembering that to be supremely great, is to be supremely good.

All that is mortal of our departed brother, lies buried in the silent tomb. We drop the tear of sorrow over his new made grave, and decorate it with never fading flowers, but his immortal spirit has burst the confines of the grave—passed through the portals of death, and ascended to meet his God—passed,

> That belt of darkness that seems to bar the way,
> Long, low and distant;
> Where the life that is,
> Touches the life to come.

Obituary.

Article CIV.

William Niehaus, M. D.

At a meeting of the medical profession held Saturday, May, 13, 1882, the following resolutions were adopted:

Whereas: The Members of the Medical Profession of St. Louis have learned of the sudden and early death of William Niehaus M.D., formerly a member of the St. Louis Medical Society, who died on the morning of the 7th inst.; in token of our full appreciation of his therapeutic and surgical attainments and practical skill and success in the specialty to which he was particularly devoted; and also for his honest, honorable and benevolent disposition, we record the following resolutions in grateful respect to his memory.

Resolved: That in the death of Dr. Niehaus the medical profession of St. Louis has lost one of its most honorable, upright and respectable professional brethren, whose urbanity, philanthropy and genuine congeniality we have always esteemed and admired.

Resolved: That we fully recognize his sound judgment and practical talent and successful treatment of the diseases pertaining to the particular specialty to which he was principally devoted.

Resolved: That we most sincerely mourn the loss of our brother, so characterised with modesty, honor, honesty and professional talent.

Resolved: That we tender to the family and friends of the deceased our heartfelt sympathy and condolence for this sad bereavement and affliction.

Resolved: That these resolutions unanimously adopted at a meeting of the medical profession of St. Louis, be published in the Medical Journals and secular newspapers of the city and copies thereof be furnished to the family and friends of the deceased.

Book Reviews.

Article CV.

Transactions of the Medical Association of Missouri, at its Twenty-fourth Annual Session held at Mexico Mo., May 17 18 and 19, 1881, 8 vo., pp. 199. (St. Louis: J. H. Chambers & Co., 1881.)

The contents of this volume are perhaps as good, if not better than those of previous volumes. When we look at the comparatively small size of the volume we cannot but wonder that so little scientific work should be gone over by the association. The papers presented are for the most part good, and as all or nearly all have long since been printed in journals and read, no criticism need here be attempted.

A System of Surgery, Theoretical and Practical in Treatises by Various Authors. Edited by J. Holmes, M. D., Cantab, First American from the Second English Edition, thoroughly revised and much enlarged, by John H. Packard, A. M., M. D., assisted by a large corps of the most eminent American Surgeons. In three volumes, with many illustrations, Vol. I. 8 vo. pp. 1007. Vol. II. pp. 1063. Vol. III. pp. 1059. (Philadelphia; Henry C. Lea's Son & Co., 1881. St Louis: J. H. Chambers & Co.)

We can do nothing but commed this admirable work. It is a complete review of surgical practice and as a reference book it will prove invaluable. Many of the chapters have been entirely rewritten by American Authors and all have been carefully and conscientiously revised.

Were we inclined to find fault with the work it would be that there is not more of it; but we always ask for more of a good thing.

The articles are intended more to illustrate general principles than particular subjects. For instance, Dr. Van Harlingen disposes of Skin Diseases in one hundred pages in an admirable manner, but not as fully as many would consider it necessary. This is the case with almost every subject and naturally so, as the domain of surgery is so extensive that an exhaustive treatise

upon it would embrace a large library. This work deserves and will no doubt meet with a large success.

THE THERAPEUTICS OF GYNECOLOGY AND OBSTETRICS. Comprising the Medical, Dietetic, and Hygienic Treatment of Diseases of Women. Second Edition, thoroughly revised and enlarged. Edited by WM. B. ATKINSON, A. M., M. D., 8vo. pp. 671 (Philadelphia: D. G. Brinton, 1881. St. Louis: Hugh R. Hildreth Printing Co.)

We reviewed the first edition not long ago, and are called upon to examine this, the second one. It possesses the good points of the other with many additions and much that was not acceptable has been judiciously omitted.

The present edition contains nearly two-hundred additional pages of matter drawn chiefly from European sources. If the process of amelioration keeps on at this pace our readers had better wait for a third edition which will doubtless be of such great excellence as to repay their tardiness. However, we can safely commend the present one as a good work of its character and as fairly representing the practice of men eminent in the profession although we still find the names of some prominent by their obscurity.

A TEXT-BOOK OF PHYSIOLOGY. By M. FOSTER. A. M., M. D., F. R. S. Second American from the Third and Revised English Edition. With extensive notes and Additions. By EDWARD F. REICHERT, M. D., with 259 illustrations, 12mo., p. 698. (Phila. Henry C. Lea's Son & Co. 1881. St. Louis: Hugh R. Hildreth Printing Co.)

The first American edition of the text-book was reviewed in a former number of the JOURNAL and it would be quite superfluous to repeat any of the words of commendation used upon that occasion. The fact that so many editions of this sterling work have been called for attests sufficiently its merits. This hand-book is admirably adapted to the needs of students, more so, perhaps, than the larger work which is rather intended for the careful reading of the more advanced physiologist.

The present edition has been revised carefully and several figures have been added to make the text more clearly intelligible. It has long since taken the foremost place of all text-books upon physiology, treating more purely of experimental and logical physiology than the works we have generally been accustomed to read. We are confidant that, at the present rate, a new edition will again be forthcoming, both on account of the rapid sales experienced and of the many new discoveries being daily made.

Books and Pamphlets Received.

ARTICLE CVI.

Medical and Surgical Reports of the City Hospital of the City of Boston. Third Series, Edited by David W. Cheever, M. D., Oliver F. Wadsworth, M. D., and A. L. Mason, M. D. 8vo., pp. 390. (Boston: Published by the Trustees, 1882.)

Electricity in Surgery. By John Butler, M. D. 12mo., pp. 109. (New York and Phila.: Boerick and Tafel, 1882.)

Proceedings of the American Society of Microscopists. Fourth Annual Meeting, held at Columbus, Ohio, Aug., 9th to 11th, 1881. 8vo., pp. 102. (Buffalo: Bigelow Brothers, Steam Printers, 1881.)

Indiana State Board of Health. Rules and Regulations issued by the State Board. To this is added a Nosological Table, prepared and published by the State Board of Health. 8vo., pp. 51. (Indianapolis: Wm. B. Burford, printer, 1882.)

Observations on Hemiplegia, based on Eighty-One Recorded Cases, with Special Reference to Cerebral Localization. By A. D. Rockwell, A. M., M. D. (Reprinted from the *Medical Record*, April 29, 1882.)

The Opium Habit; its Successful Treatment, by the Avena Sativa. By E. H. M. Sell, A. M., M. D. (Reprint from the *Medical Gazette*, April, 22, 1882.)

Current Fallacies about Vaccination. A Letter to Dr. W. B. Carpenter, C. B., etc. By P. A. Taylor, M. P. Second Edition of 100,000. With additional remarks on Dr. Carpenter's Article on Disease-Germs, in the XIX Century Magazine, for October. (London: E. W. Allen, 1881.)

The Death-Rate of Memphis. By Geo. E. Waring, Jr. (Reprint from the *American Architect*, March 25, 1882.)

The "Essentials" of a law to regulate the Practice of Medicine in Indiana. By Thad. M. Stevens, M. D. (Read before Mitchell, (Ind.) Dis. Medical Society. Dec. 28, 1881.)

Our Thirtieth Year; Annual Address, before the Kentucky State Medical Society. By J. W. Holland, M. D. (Louisville, Ky.: John P. Morton & Co., printers.)

Ovariotomy: Difficulties, Diagnostic and Operative; Continued Menstruation after Ovariotomy. By Geo. J. Engelmann,

M. D. (Extracted from the *American Journal Medical Sciences*, April, 1882.)

Working Bulletin for the Scientific Investigation of Jamaica Dogwood.

Working Bulletin for the Scientific Investigation of Cascara Sagrada.

Working Bulletin for the Scientific Investigation of Quebracho.

(Sent out by the Scientific Department of Parke Davis & Co.)

Civilization in its relation to the Decay of Teeth. An Essay read before the international Medical Congress, August, 1881. By Norman W. Kingsley, M. D. S., D. D. S. (New York: D. Appleton & Co.)

Galvano-caustic Method in Nose, Pharynx and Larynx. Read before International Medical Congress, August 1881. By J. Solis Cohen. (London: J. W. Kolckmann. 1881.)

True Aneurism of the Brachial Artery at its upper Third, Cured by Compression Maintained fer Ten Hours by Means of a Conical Pad, with a résumé of the literature of the subject. By L. Emmett Holt, A. M., M. D. (Extracted from the *American Journal of the Medical Sciences*, April, 1882.)

Hygiene in Relation to the Eye. By C. J. Lundy, M. D. A Paper read before the State Sanitary Convention, at Ann Arbor, Feb. 28, 1882.

Acute Plastic Bronchitis. By J. P. Kingsley, M. D. (Reprint the *St. Louis Courier of Medicine*. March, 1832.)

News Items.

ARTICLE CVII.

Dr. W. Bedford Craig, of St. Joseph, Mo., has moved his residence to Denver, Col.

Dr. Wm. Dickinson, of this city, has been invited to deliver a course of lectures on the "Eye," at the Medical Department of the State University.

Dr. Mulhall, of this city, intended presenting Dr. Shurley's electrodes to the members of the State Association, but was not enabled to do so through a mistake.

Dr. Pinckney French, of Mexico, Mo. has been tendered and has accepted the chair of Surgical Anatomy in the College of Physicians and Surgeons of Chicago.

The younger element of the Mo. Medical Association found a fitting recognition in the nomination of Drs. French and Lutz as Vice-Presidents for 1883.

THE St. Louis Hospital in charge of the Sisters of Charity is one of our best hospitals and they have recently procured an easy ambulance by which patients will be conveyed to the hospital free of charge, at any hour of the day or night. Their telephone number is 962.

The institution has been so long and favorably known that we need not refer to its particular advantages.

The Seventh Annual Meeting of the Grand River Medical Society will take place at Chilicothe, beginning June 6, and continuing three days.

A number of papers will be read; among them, one by W. R. Simpson, M. D., on "Entero-Colitis in Infants," and one by G. C. Dewey, M. D., on "Uterine Hemorrhage after Abortion.

All members are urged to attend.

E. A. WAGGENER, M. D., Pres.
A. L. MCCORKLE, M. D., Sec.

DR. Edw. Borck, secretary of the College for Medical Practitioners and Surgeon in charge of the Children's Department,

has opened a temporary Clinic for the surgical treatment of children at his office cor. 4th. and Market Sts. To maintain it he asks the assistance of all to obtain the following articles:

Dressings, old linen, such as table cloths, sheets, bandages, flannel, chamois skin, etc. Food, condensed milk, ground oat meal or barley, Miller's or Liebig's Infant Food, beef and malt extracts, etc. Appliances, trusses, shoulder braces, or any orthopedic apparatus, etc. Any old apparatus acceptable as they can be refitted. Medicines.

He also suggests that a children's hospital is greatly needed and all who feel inclined to contribute to such a laudable undertaking are invited to do so. Any sum of money, "no matter how small" you may feel inclined to give, toward a special fund for the establishment of such a Hospital will be received and invested for that purpose only, and duly acknowledged and accounted for by the undersigned Trustees of the College.

DR. THOS. F. RUMBOLD, Dean 1225 Washington Avenue; COL. FRED. T. LEDERGERBER, Att'y at Law. Treasurer. 100 N Fourth Street; or, DR. EDW. BORCK, Sec. and Surgeon in charge of Children's Department. S. E. Corner Fourth and Market Streets.

THE Secretary of the Surgical Section of the American Medical Association has the following progress to report, in regard to papers for the next meeting:

Prof. A. C. Post, "Lupus Exedens of Face;" Dr. J. R. Weist, "Elastic Tension in the Management of Cases of Delayed Separation of Ligature;" Dr. Henry A. Martin, "Advances in Conservative Surgery of the Joints;" Dr. Carl Seiler, "Some Remarks upon Electricity in Surgery;" W. M. Fuqua, "Subperitoneal Surgery;" Dr. A. Van Derveer, "Cleft of Hare Palate;" Dr. Oscar J. Coskery, "Modification of Plaster Splints;" Dr. C. W. Nesbitt, "Ununited Fracture of Femur Treated by Exercise;" Dr. John E. Link, "Alcohol as an Anæsthetic;" Dr. William Hill, "Laparotomy;" Dr. Ephraim Cutter, "Bi-Fracture of Patella, Partial Bony Union After Eight Years;" Dr. Wm. Stewart, "Fracture of Elbow Joint." Drs. J. W. Dora, Joseph H. Warren, Henry O. Marcy, Edward Borck, and B. H. Riggs, promise papers, titles not received. The Secretary, owing to the death of the chairman, will read a paper on "Excision of Portions of the Alimentary Canal Covered with Peritoneum," as the address on Surgery. Gentlemen wishing to read papers will please notify the Secretary of the Section. William A. Byrd, M. D., 407 Jersey street, Quincy, Illinois.

THE American Society of Microscopists will hold its Fifth Annual Meeting at Elmira, N. Y., beginning Tuesday, Aug. 15th, 1882, and continuing four days.

Members, and those desiring to become such, are requested to notify Dr. Thad. S. Up de Graff, Sec'ty Elmira Microscopical Society, of their intention to be present.

The meeting is expected to be a large and interesting one and the Society is on the high road to success. The present President is Dr. Geo. E. Blackham.

THE Fourth Annual Congress of the American Laryngological Association will be held in Boston, commencing on Monday, June 12, 1882, at 10 A. M., and continuing during the two following days, sessions being held each morning and afternoon.

The council has adopted the following subjects for discussion:

1. The singing voice, its physiology, pathology and treatment. 2. The nature and forms of laryngeal ulcer. 3. On the utility or non utility of local applications in chronic catarrhal laryngitis. 4. Ozæna, its pathology and treatment.

The volume of transactions for 1881 will be ready for distribution within a few days.

The secretary, Dr. Geo. M. Lefferts, requests that the titles of all papers to be read, not yet received by him, may be sent in at as early a date as possible before the meeting.

Dr. Fred. J. Knight, the presiding officer of this Association has invited the Medical Faculty of Harvard University and the Physicians and Surgeons of the Massachusetts General and City Hospitals to meet the Fellows of the Association, Monday eve., June 12, 1882, at 9 o'clock, at 131 Rolston Street.

To THE FELLOWS of the American Laryngological Association;

Please inform the Committee of Arrangements for the fourth Annual Congress if you expect to be present at the Annual Dinner, at the Parker House, Boston, Tuesday evening June 13.

As the city may be crowded at this season of the year, the committee would be glad to engage rooms for any Fellows, so desiring, at Parker's or Young's, our best hotels on the European plan.

S. W. LANGMAID, M. D.,
Chairman Com. of Arrangements.
129 Boylston Street,
Boston, Mass.

THE undersigned committee have been intrusted by the Alumni Association of the St. Louis Medical College, with the preparation of a suitable memorial of the late Prof. John T. Hodgen.

It is intended that the proposed memorial shall be expressive of the high esteem of all who were so fortunate as to know Dr. Hodgen, and the committee are confident of the hearty support of the profession in the undertaking which they are about to inaugurate.

The committee have decided, after mature deliberation, to procure a marble bust and an oil portrait of Dr. Hodgen, and they respectfully solicit subscriptions.

All communications for this purpose are to be addressed to Dr. Frank J. Lutz, 2002 Carondelet Avenue, St. Louis, Mo.

Wm. L. Barrett, M. D., Willis P. King, M. D.,
John Green, M. D., Wm. A. McCandless, M. D.,
J. Friedman, M. D., Frank J. Lutz, M. D.,
Charles H. Hughes, M. D.,
For the Alumni Association, St. Louis Medical College.

Rev. W. G. Eliot, D. D., James E. Yeatman, Esq.,
Prof. J. B. Johnson, M. D., J. M. Allen, M. D.,
Henry Hitchcock, Esq., Prof. E. H. Gregory, M. D.,
E. C. Simmons, Esq., Rev. S. J. Niccols, D. D.
W. S. Marshall, M. D., Prof. G. M. B. Maughs, M. D.,
Associate Committee.

THE LOUISIANA STATE MEDICAL ASSOCIATION.—This society was organized by a convention of the physicians of Louisiana, five years ago; at the last annual meeting the following officers were elected for the year 1882: Dr. A. A. Lyon, President; Drs. J. P. Davidson, D. R. Fox, A. B. Anall, R. H. Day. W. W. Ashton and J. D. Hammond, Vice-Presidents; Dr. S. F. Salomon, Recording Secretary; Dr. G. K. Pratt, Treasurer; Dr. S. S. Harrick, Corresponding Secretary.

STANDING COMMITTEES.

On Judiciary. Drs. C. M. Smith, S. G. Richardson and H. S. Lewis.

Reports and Essays. Drs. Samuel Logan, A. B. Miles, F. W. Parham, John B. C. Gazzo and W. Hilliard.

On State Medicine and Legislation. Drs. S. C. Chaille, J. P. Davidson, T. J. Aleen, J. S. Harrick, G. A. B. Hays, P. B. McCutchon, J. W. Dupré and F. W. Parkham.

Publication. Drs. S. S. Harrick, S. F. Salomon and Geo. K. Pratt.

The next annual meeting was to take place at New Orleans, on the last Wednesday in March, 1882.

The following circular was addressed by the Corresponding Secretary of the Louisiana State Medical Society, to all members.

New Orleans, March 21, 1882.

Owing to the prevailing flood throughout the State, and consequent inability of a large majority of members to attend, it has deemed advisable to postpone the annual meeting of the Louisiana State Medical Society. Due notice will be given of the time and place of next meeting.

J. P. DAVIDSON, M. D., Vice-President.
S. S. HARRICK, M. D., Cor. Secretary.

AMERICAN MEDICAL ASSOCIATION.

St. Paul, Minnesota, May 12. 1882.

EDITORS JOURNAL:

In anticipating the meeting of the American Medical Association in this city on the 6, 7, 8, and 9 of June prox., the Committee of Arrangements have secured the following rates from the various railroads centering at this point:

The Chicago Milw. and St. P. R. R. $12. 50 for round-trip ticket from Chicago to St. Paul and return, to delegates upon presentation of credentials at depot offices in Chicago.

The Chicago, St. P. Minn. and Omaha offer the same rates from Chicago and all points between Chicago and St. Paul two cents a mile for round-trip tickets.

The Minn. and St. Louis R. R. offers the same rates ($12. 50) from Chicago to St. Paul and return, via the Chicago, R. I. and Pacific R. R., and a rate of $18.00 from St. Louis to St. Paul and return, via St. Louis, C. B. and Q. R. R. (via Albert Lea.) Also one-fifth fare returning to all intermediate points.

All tickets on above roads good till July 10th.

The St. P. Minn. and Man. R. R. will give passes to every delegate, good for the entire month of June. It connects Minneapolis and Lake Minnetonka with St. Paul.

The Northern Pacific R. R. will return all delegates for one-fifth fare, and offers free transportation for the month of June to delegates, to the Yellowstone Valley and return.

The Hotels of St. Paul are the "Merchants," ($3 to $3. 50); "Metropoliton," ($3 to $3. 50); "Windsor," ($2.50); "Clarendon," ($2.50); "Sherman," ($2.50); "International," ($2.00); St. James, ($2.00); and "Commercial," ($2.00). The three first are provided with elevators.

Minneapolis, a city of sixty thousand, lies nine miles from St. Paul on the line of the St. P. Minn. and Man. road, and has fine hotel accomodations. Half-hourly trains connect the two cities. Trains run almost hourly to and from Lake Minnetonka.

Very respectfully, ALEX. J. STONE,
Chm. Com. Arrangements.

Special rates to physicians and their families, wishing to attend the American medical Convention, at St. Paul, June 6:

The following rates include meals and berth.

St. Louis, Clarksville and Louisiana to St. Paul -	$12.00
" " " " " " and return	$24.00
Quincy, Lagrange and Canton to St. Paul - -	$11.15
" " " " " " and return	$22.25
Alexandria and Warsaw to St. Paul - - -	$10.75
" " " " " and return	$21.50

Keokuk to St. Paul	$10.40
" " " and return	$20.75
Ft. Madison to St, Paul	$9.75
" " " and return	$19.50
Burlington to St. Paul	$9.00
" " " and return	$18.00
Muscatine to St. Paul	$8.50
" " " and return	$17.00
Davenport to St. Paul	$8.15
" " " and return	$16.25
Dubuque to St. Paul	$5.90
" " " and return	$11.75
McGregor and Prarie DuChien to St. Paul	$4.75
" " " " " and return	$9.50
Winona to St. Paul	$2.65
" " " and return	$5.25
Clinton to St. Paul	$7.40
" " " and return	$14.75
LaCrosse to St. Paul	$3.40
" " " and return	$6.75

Yours Truly,

F. L. JOHNSTON, Secy. and G. P. A.

To all physicians who have the time to spare. we would recommend the passage by the St, Louis and St. Paul Packet Co. Their officers are attentive and kind and do all in their power to make their passengers happy. Instead of being tired, dusty and cross, as every one is who travels by railroad, one is really refreshed and eager for the work of a medical meeting.

☞ ERRATUM.—On page 638 line 29 from the top, *small one* should read *smell.*

METEOROLOGICAL OBSERVATIONS.

By A. WISLIZENUS, M. D.

The following observations of daily temperature in St. Louis are made with a MAXIMUM and MINIMUM thermometer (of Green, N. Y.). The daily minimum occurs generally in night, the maximum at p. m. The monthly mean of the daily minima and maxima added and divided by two, gives quite a reliable mean of the monthly temperature.

THERMOMETER, FAHRENHEIT—APRIL., 1882.

Day of Month.	Minimum.	Maximum.	Day of Month	Minimum.	Maximum
1	53.0	81.0	18	50.0	73.0
2	63.0	85.0	19	55.0	58.0
3	64.0	84.0	20	46.5	58.5
4	64.0	82.0	21	48.0	73.0
5	66.5	82.0	22	56.0	65.0
6	62.0	85.0	23	48.5	31.5
7	66.0	76.5	24	46.5	61.0
8	63.0	77.0	25	49.0	73.0
9	58.5	79.5	26	60.0	79.0
10	39.0	52.0	27	53.0	70.5
11	31.0	45.0	28	56.0	68.0
12	33.0	46.0	29	49.0	64.0
13	39.0	52.0	30	44.0	62.0
14	42.0	62.0	31		
15	38.0	56.0			
16	44.0	63.0	Means	51.2	67.5
17	44.0	68.0	Monthly Mean.	59.3	

Quantity of rain, 3.51 inches.

MORTALITY REPORT.---CITY OF ST. LOUIS.

FROM APRIL 8, 1882, TO APRIL 29, 1882, INCLUSIVE.

Small Pox	2	Childbirth	1	Convulsions & Trismus Neonatorum	29	Syphilis	7
Scarlatina	37	Inanition, Want of Breast Milk, etc.	7	Hydrocephalus and Tub. Meningitis.	4	Apoplexy	0
Pyæmia & Septicæ	6	Alcoholism	7	Meningitis & Encephalitis	21	Dis. fem. gen. org.	0
Erysipelas	1	Rheumat'm & Gout	1	Other Diseases of the Brain and Nervous System	15	Surgical Operation	0
Diphtheria	21	Cancer and Malignant Tumor	12	Cirrhosis of Liver and Hepatitis	7	Deaths by Suicide	9
Membran's Croup.	1	Phthisis & Tuberculosis, Pulmon	69	Enteritis, Gastro-Enteritis, Peritonit, and Gastritis'	21	Deaths by Accid'ts	3
Whooping Cough.	4	Bronchitis	20	Bright's Disease and Nephritis	5	Deaths by Homicid	0
Ovarian tumor	0	Senility	18	Other Diseases of Urin ary Organs.	1	Congen Defor'ty	2
Measles	4	Pneumonia	30	Diabetes	0	Total Deaths from all Causes	516
Typhoid Fever	18	Heart Diseases	21	Syphilis	7	Total Zymotic Diseases	151
Cerebro Spinal Fev	6	Other Diseases of Respir'y Organs	16	Apoplexy	0	Total Constitutional Diseases	102
Remittent, Intermittent, Typho-Malarial, Congestive & Simple	12	Skin Disease	0	Dis. fem. gen. org.	0	Total Local Diseases	193
Contin'd Fevers,	12	Marasmus—Tabes Mesenterica and Scrofula	9	Surgical Operation	0	Total Develop'tal Diseases	37
Puerperal Fevers	2	Other Const. Dis.	7	Deaths by Suicide	3	Deaths by Viol'ce	33
Diarrhœal Disea's	22			Deaths by Accid'ts	3	Unknown	0
Other Zymotic Diseases	1			Deaths by Homicid	4		
				Congen Defor'ty	24		

CHAS. W. FRANCIS, *Health Commissioner.*

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